THE EFFECTS OF CONTINGENCY CONTRACTING ON RACE, ACADEMIC ACHIEVEMENT, CLASSROOM BEHAVIOR, AND SELF-ESTEEM OF LOW-PERFORMING MALE ELEMENTARY STUDENTS

By

LEILA W. PRATT

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By

Leila W. Pratt

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The purpose of this study was to investigate the use of contingency contracts as an effective intervention to motivate low-performing black and white males in regular elementary classrooms to greater academic achievement. A second purpose was to determine if the use of contingency contracts would improve the classroom behavior and self-esteem of low-performing males. A third purpose was to determine whether these variables differed for the two racial groups.

An experimental randomized pretest-posttest control group design was used for this study. Seventy-two low-performing black and white males were randomly assigned to experimental and control groups at three elementary schools. Weekly contracts and rewards were administered to students in

the experimental group upon completion of specific goals. Students were also pretested on measures for academic achievement, classroom behavior, and self-esteem. Following a 6-week implementation period, students were posttested on these same variables, using the same instruments. Independent variables were contingency contracts, race, and schools.

The three-way analysis of covariance statistical procedure was conducted to determine whether the main effect and treatment interaction effects were significant. The results indicated a significant main treatment effect for academic achievement and self-esteem. When students' level of achievement improved, self-esteem also improved. In addition, a significant treatment and school interaction effect was found for classroom behavior. Improvement in student classroom behavior differed for the three schools involved in the study. Race was not a significant factor. Overall results from conducting the analysis of covariance indicated contingency contracts were an effective intervention strategy and could be used to improve academic achievement, classroom behavior, and self-esteem of low-performing and failing elementary school male students.

CHAPTER I
INTRODUCTION

The launching of Sputnik in 1957 gave impetus to the first alarm concerning the low academic achievement of students in America (Saylor, Alexander, & Lewis, 1981). The alarm intensified when the National Commission on Excellence in Education (1983) reported poor schooling was a danger to the security of the nation.

As the decade of the 1990s began, educating students who had failed to meet minimum academic standards was still a national concern (Tyler, 1989). Reports of low-achieving and failing students were being discussed by educators throughout the nation. Perhaps the most disturbing aspect of this discussion was that despite the many educational reforms and programs that had been instituted at the high school and preschool levels for students at risk for failure, the problem of low academic achievement and failure has persisted (Comer, 1990; Evans, Corsini, & Gazda, 1990; Hill, 1989; Knapp, Turnbull, & Shields, 1990; Ogbu, 1990; Ramey & Suarez, 1985; Tyler, 1989).

Increasingly, more citizens have realized that the future of the nation depends upon a competitive world economy

and a work force that is able to master technology (Gustafson, 1989). When students were unable to achieve a functional level of literacy in even the basic skills of reading and math, the economic security and stability of the nation were threatened (Bhola, 1981; Graham, 1987; Holland, 1989; Yeakey & Bennett, 1990).

Researchers found that the concerns over the effects of low academic achievement and failure seemed justified, and the impact of failure was threatening not only on the national level but was threatening on the local and personal levels as well (Canfield, 1990; Gustafson, 1989; Hodgkinson, 1985; Ogbu, 1990; Shoenmyen, 1988). On the local level, a variety of social problems existed that researchers demonstrated were closely linked to low academic achievement and failure. Such social problems were

1. poverty (Graham, 1987; Hewett & Forness, 1984; Hodgkinson, 1985; Knapp et al., 1990; Oliver, 1989).
2. criminal activity (Foley, 1990; Keller, 1989; Poussaint, 1983).
3. disruptive classroom behavior (Curwin & Mendler, 1980; Emmer, Evertson, & Anderson, 1980; Foley, 1990; Kauffman, 1989; Knujufu, 1990), and
4. reduced college enrollment (Baratz, 1986; Collison, 1987; Keller, 1989; Ogbu, 1990; Wyche, Sr., 1989; Yeakey & Bennett, 1990).

These social problems threatened not only the security at the local level but jeopardized stability by placing heavy financial responsibility on the community to address these concerns.

Researchers have also identified a variety of problems that affected students on a personal level as a result of low academic achievement and failure. Such personal problems consisted of

1. lack of self-esteem (Canfield, 1990; Gursky, 1990; Hodgkinson, 1985; Ogbu, 1990).
2. dropping out of school (Baratz-Snowden, 1987, Cole, 1983, DeRidder, 1990; National Association of Elementary School Principals, 1990; Ogbu, 1990; Wyche, Sr., 1989, and an
3. inability to compete in society (Graham, 1987; Gustafson, 1989; Nettles, 1988; Tyler, 1989; Yeakey & Bennett, 1990).

The personal problems low-achieving and failing students experienced were damaging to the sense of personal worth of these students and affected their ability to achieve future success (Covington, 1984).

When students began to experience academic failure, the resulting impact was frequently lower motivation to perform academic tasks, an increase in classroom behavior problems, and lower self-esteem (Canfield, 1990; Glasser, 1986; Kauffman, 1989). If academic failure was repeated, students

tended to lose their sense of value and personal worth and developed negative behavior patterns that seemed to hamper their ability to successfully compete in society (Covington, 1984; DeRidder, 1990; Holland, 1989; Metcalfe, 1981; National Association of Elementary School Principals, 1990; Ogbu, 1990).

The negative behavior patterns that failing students developed were damaging to the relationship between the teacher and student. The damaged relationship interfered with the student's ability to perform academic work (Kauffman, 1990). The longer students experienced academic failure, the more difficult it was for the teacher to motivate them to learn (Brophy, 1987). Once students became convinced it was impossible to attain academic success, regardless of effort, they stopped trying to succeed academically (Harari & Covington, 1981).

Several investigators indicated that failure for students began as early as the elementary grades. As a result, failing students often did not experience the rewards of academic success that would assist them in establishing behavior patterns that fostered future success (Ames & Ames, 1981; Ogbu, 1990). Also, failing students resisted classroom instruction and displayed defensive, disruptive behaviors to protect their sense of worth (Covington & Omelich, 1981; DeRidder, 1990). These defensive and disruptive behaviors

prevented students from learning (Emmer, Evertson, & Anderson, 1980).

On the other hand, regular education teachers tended to feel helpless and inadequate in their attempt to implement interventions and teaching strategies that would remotivate students with histories of failure and negative behavior patterns to learn (McKee, Witt, Elliott, Pardue, & Judycki, 1987; Safer, 1982). Therefore, positive intervention strategies that have been effective in remotivating students to learn may also help regular education teachers feel more in control of the learning situation and reverse the negative behavior patterns failing students have developed toward learning (Gettinger, 1988; Murphy, 1988).

Although across the nation low-performing and failing students were considered a problem, Florida seems to have been more heavily affected than many other states. Florida has a large percentage of migrant students and students living in poverty. These factors placed students at a higher risk for low academic achievement and failure (Gustafson, 1989; Shoenmyen, 1988).

Researchers examined the problems of failure and found that Florida had the highest failure and dropout rates in the nation. During the 1987-88 school year, Florida had more males dropping out of school and going to prison than it had graduating from high school. Research also indicated 80 percent of Florida's prison inmates had dropped out of high

school and Black males represented 51 percent of this population (Gustafson, 1989; Shoenmyen, 1988).

Although much attention has focused on the problems of academic failure in the larger cities and urban schools, rural schools have also experienced the problems of low academic achievement and failure (Olson, 1990). Public schools in rural counties accounted for a large percentage of the problems of failure that were affecting Florida. For example, the dropout rates for rural public schools in Levy County, Florida, during the 1988-1989 school year were approximately 25 to 35 percent. Males represented 58 percent of the students dropping out of school compared to 42 percent for females (Levy County School System, 1990).

Rural counties often do not have the educational resources that larger, more affluent counties have to assist failing students. Therefore, the problems associated with low academic achievement and failure were further compounded because resources were scarce. Thus, it is important to identify and empirically validate positive intervention strategies for use in the classrooms, in small as well as large population areas, and to assist teachers in addressing the problems associated with failure (Clabaugh & Rozycki, 1989; Knujufu, 1990; Ogbu, 1990).

The problems of low academic achievement and failure have affected not only urban and rural schools but have appeared in all socioeconomic groups (Gustafson, 1989).

However, researchers have found that some groups are more at risk for failure than others. For example, males living in poverty were reported to be at a greater risk for academic failure than females (Gustafson, 1989; Knujufu, 1990; Ogbu, 1990). In the United States, attempts have been made to educate all students. This process brought students from every background into public schools. However, the impoverished backgrounds of many of these students placed them at a disadvantage for academic success. Often their preschool experiences had not prepared them to succeed in a school system whose aims were meeting the needs of more culturally advantaged students (Knujufu, 1990; Ogbu, 1990).

Educational researchers have provided information on a variety of intervention strategies to schools, and schools have implemented research-based programs to raise the achievement levels of failing students. However, the persistence of the problem indicates that a need exists to continue to look for effective interventions and target at-risk students during the elementary grades.

Need for the Study

Educators need to assist low-performing and failing students to attain as high a level of academic success as students can reach. When students begin to fail, regardless of their race, teachers feel a sense of failure (Kauffman, 1989; Weiner, 1980). To mitigate student failure and

teachers' feelings of inadequacy in trying to remotivate and teach failing students, effective interventions need to be implemented (Bardon, 1987; McKee et al., 1987).

Effective interventions should remotivate students to want to learn and assist in raising their level of achievement. When students' level of achievement increases, the effect should be an increase in the student's level of motivation to succeed academically, an improvement in self-esteem, and a decrease in the student's disruptive behavior in the classroom (Byrne, 1984; Gurney, 1987; Hadley, 1988; Kauffman, 1989).

Interventions that have been effective in encouraging higher achievement were reported by one group of educators who worked with at-risk populations. Special educators have used contingency contracts and have reported positive, effective results across ages and races (Murphy, 1988). Contingency contracts have been less used and empirically validated by educators in regular education classrooms. Yet, there are many low-achieving students and failing students in regular education classrooms who do not qualify for exceptional student education services (Shapiro, 1988).

Contingency contracts may be used as a means of motivating low-performing and failing students to reach academic goals. These low-performing and failing students could benefit from academic success, high self-esteem, and the ability to maintain acceptable behavior in the classroom

(Canfield, 1990; Emmer, Evertson, & Anderson, 1980; Kauffman, 1989; Metcalfe, 1981).

A critical element is that academic failure begins when students are in the elementary grades. Gustafson (1989) estimated that 31.3 percent of students entering kindergarten during the 1983-84 school year had been retained at some point in the primary grades (kindergarten through third).

Baratz (1986) also indicated that males, especially Blacks, tended to drop below grade level in elementary school and fall further behind as they got older. This contention was supported by Knujufu (1990), who asserted that after Black males passed the third grade, their academic difficulties and social-personal problems tended to worsen.

Gustafson (1989) predicted 40 percent of Florida's students were at risk of dropping out of school and developing social-personal problems. Without effective interventions implemented in the early grades to remotivate students to succeed academically, 50 percent of Florida's students will be at risk for failure by the year 2000. It was further estimated that it will cost the state more money to rehabilitate students once they have dropped out of school than it will to prevent academic failure (Gustafson, 1989).

The research indicated a need for a study of contingency contracts as an effective tool to motivate males to achieve at higher levels in regular education classrooms. This need appeared great in rural areas of north Florida where males

represent a large number of failing students (Levy County School System, 1990; Levine & Havinghurst, 1989; Olson, 1990). Researchers have provided theoretical justification for such a study.

Theoretical Rationale for the Study

The theoretical basis underlying contingency contracts derives primarily from operant laboratory research which was developed by Skinner (Murphy, 1988; Skinner, 1971). Contingency contracts, like Skinner's operant conditioning technique of positive reinforcement, were based almost entirely on rewards and allowed teachers to work with students in positive ways (Murphy, 1988).

Skinner's (1971) theory, which provided the theoretical foundation for this study, is based on principles of behavior change. According to these principles, all behavior is learned and can be changed by manipulating the environment. Operant techniques such as positive reinforcement and punishment were used to manipulate the student's environment to bring about behavior changes. However, the research on these two techniques indicated that positive reinforcement procedures produced a more lasting behavior change than punishment (Shapiro, 1988; Smith, 1984).

Skinner (1971) found from experimenting with learning that behavior was influenced by past learning experiences and the consequences that followed the behavior. If the

consequences were positive, the behavior was strengthened, and if the consequences were negative, the behavior was weakened. Based on this assumption, if a student performed well in school, was rewarded with success, and the experience was satisfying, under similar conditions, the student continued to perform well in school. Conversely, if a student performed poorly in school, was punished with failing marks, and the experience was negative, under similar conditions, the student tried to withdraw from the learning experience causing the discomfort (Curwin & Mendler, 1980).

Bandura's (1977) social learning theory, which grew out of Skinner's principles of behavior change, supported the premise underlying this study. According to this theory, students imitate and learn from watching significant others and behave according to the consequences that follow their behavior. Based on the tenets of both theories, the assumption can be made that what students believe or think tends to influence their motivation to learn, their self-esteem, and behavior and that students will work harder and learn more quickly if they are rewarded for doing something right, rather than punished for doing something wrong (Bandura, 1986; Covington, 1984; Smith, 1984).

Weiner's (1984) attribution theory provided further support for the tenets underlying this study. According to the attribution theory, what students believe about themselves and their ability, and the consequences that

follow their behavior, will affect their school performance. When students attributed success to sufficient ability, they undertook similar tasks in the future because they anticipated doing well. In contrast, students were less likely to strive to accomplish academic goals if they felt powerless to succeed again due to insufficient ability.

Based on the theoretical constructs underlying this study, students should be able to learn regardless of their failure histories, and academic progress should occur if the learning environment is positive (Comer, 1990). Contingency contracts, which were based on reinforcement techniques to facilitate behavior change, provided a positive approach to motivating students to learn, managing their behavior in the classroom, and improving their self-esteem (Mercer & Mercer, 1985; Murphy, 1988). Therefore, contingency contracts should be considered a viable alternative as an effective intervention strategy to address the problems of low-achieving and failing male students (Murphy, 1988).

Problem

Educators wish to assist low-performing and failing students to succeed academically. Contingency contracts have been reported by special educators to be an effective intervention in assisting low-performing and failing students in accomplishing this aim. Yet, the use and empirical

validation of contingency contracts in regular elementary education classrooms have been limited.

Purpose

An experimental study was conducted to investigate the use of contingency contracts as an effective intervention to motivate low-performing Black and White male students in regular elementary education classrooms to achieve academically. A second purpose was to determine if the use of contingency contracts would also improve the classroom behavior and self-esteem of low-performing male students. In addition, the effects of the student's race on these variables were investigated. More specifically, this researcher attempted to answer the following questions.

Research Questions

1. What effect do contingency contracts have on students' motivation to begin and complete academic work?
2. What effect do contingency contracts have on students' behavior and compliance with classroom rules?
3. What effect do contingency contracts have on students' academic achievement and grades?
4. What effect do contingency contracts have on students' self-esteem?
5. What effect does the race have on academic achievement, self-esteem, and classroom behavior?

6. What do students perceive to be the cause of their success or failure?

These research questions resulted in nine hypotheses that were tested in this study.

Design for the Study

The design for this study was a randomized pretest-posttest experimental control group design (Isaac & Michael, 1982). A total of 72 low-performing fourth- and fifth-grade male students (36 Black and 36 White) participated in the study. Criteria for selection of subjects consisted of (a) enrollment in fourth and fifth regular education classes, (b) a cumulative grade-point average of 2.75 or less in the areas of reading, math, science, social studies, and language, (c) normal intelligence, (d) and regular attendance.

Hypotheses

The following nine hypotheses were tested in this study:

H_1 No significant difference will exist between the adjusted mean posttest scores for the measure of academic achievement for low-performing students who receive contingency contracts when compared to low-performing students who do not receive contingency contracts.

H_2 No significant difference will exist between the adjusted mean posttest scores for the measure of classroom behavior for low-performing students who receive contingency contracts when compared to low-performing students who do not receive contingency contracts.

H_3 No significant difference will exist between the adjusted mean posttest scores for the measure of self-esteem for low-performing students who receive contingency contracts when compared to low-performing students who do not receive contingency contracts.

H_4 There will be no school and treatment interaction effect on the measure of academic achievement for low-performing students.

H_5 There will be no school and treatment interaction effect on the measure of classroom behavior for low-performing students.

H_6 There will be no school and treatment interaction effect on the measure of self-esteem for low-performing students.

H_7 There will be no race and treatment interaction effect on the measure of academic achievement for low-performing students.

H_8 There will be no race and treatment interaction effect on the measure of classroom behavior for low-performing students.

H_9 There will be no race and treatment interaction effect on the measure of self-esteem for low-performing students.

Each hypothesis was tested separately at alpha = .05 for the variables academic achievement, classroom behavior, and self-esteem. A statement of the limitations of the study addressing the generalizability of the results can be found in Chapter IV.

Definition of Terms

A variety of terms are being defined so clarity in the study is facilitated.

Low-performing students (LPS) are students identified by the teacher as performing below grade level in reading, math, science, social studies, and language. The LPS must have earned a 2.75 cumulative grade-point average or less in the above subjects for a 6-week grading period during the 1990-91 school year.

Behavior-problem students (BPS) are students identified by the teacher as students who do not comply with specified classroom rules.

Self-esteem refers to the value a student places on the self (Metcalfe, 1981). It is based upon beliefs the student holds of self, others, and the world in general as a result of real-life experiences with significant others and a conviction about basic worth and values (Magee, 1987).

Poverty is defined by the state guidelines for family income and size (gross salary range from $8,164.00 to $27,638.00), and students meeting eligibility criteria for the free and reduced school lunch program (Florida School Laws, Chapter 228, 1990).

Motivation is defined as the student's willingness to perform tasks without visible external pressure to do so, and when other behavior alternatives are available (Allen, 1982).

Contingency contracts are written agreements between two or more persons stating specific consequences for identified specific behaviors (Mercer & Mercer, 1985; Murphy, 1988).

Summary

The focus for this study is presented in Chapter I. The issue of low-achieving and failing students was identified as a national and local concern with failure occurring at a higher rate for males than for females. The need for the study arose from the need for effective intervention strategies to prevent student failure and implementation of these strategies in the early elementary grades. The rationale for the study focused on the theoretical foundation for using contingency contracts as positive, effective interventions.

The statement of the problem indicated that contingency contracts had been used by special educators but had not been empirically investigated with Black and White low-performing and failing male students in regular elementary education classrooms. The purpose of the study was to investigate the use of contingency contracts as an effective intervention and the effects such contracts might have on low-performing male students' motivation to perform academic work, their classroom behavior, and self-esteem. In addition, the effects of the student's race on these variables were investigated.

Research questions, an overview of the research design, hypotheses tested, statement of the limitation of the study and definitions of terms used within the study to facilitate clarity were also covered. Chapter II is a review of

relevant research, and Chapter III covers the methodology procedures employed in the study. Chapter IV contains the results of testing the nine null hypotheses, and Chapter V concludes with a summary, a discussion of the results, conclusions, and recommendations for further study.

CHAPTER II
REVIEW OF THE LITERATURE

The purpose of this study was to investigate the use of contingency contracts as an effective intervention to motivate low-performing Black and White male students in regular education classes to achieve academically. A second purpose was to determine if the use of contingency contracts would improve the classroom behavior and self-esteem of low-performing male students. A third purpose was to investigate the differences between Black and White males on these variables.

A review of the literature relevant to the purpose of this study was conducted. The review encompassed the following topics: (a) academic failure, (b) behavior problems, (c) self-esteem, and (d) effective intervention strategies.

Academic Failure

Students who had experienced academic failure were inclined to perform below minimum grade-level academic standards and to make failing marks in such academic subjects as reading, math, science, social studies, and language

(Rose, Medway, Cantell, & Marus, 1983). When students experienced repeated failure, the impact was frequently a lack of motivation to perform academic work, an increase in behavior problems, and lowered self-esteem (Canfield, 1990; Kauffman, 1989). When the failure cycle continued, students tended to develop negative behavior patterns and viewed dropping out of school as a viable alternative to the failure and loss of self-esteem (DeRidder, 1990; Ogbu, 1990). Research has indicated that students tend to experience academic failure as early as the elementary grades, and Black males and males from impoverished families tend to be more adversely affected than females and other groups (Bond, 1981; Boyer, 1989; Knujufu, 1990).

Poverty

Students living in poverty were defined as those students whose parents' gross income fell within the 1990-91 state guidelines for poverty (i.e., income range from $8,164.00 to $27,638.00, depending on the size of the family). Students were also classified as living in poverty who met the state eligibility criteria for the free and reduced school lunch program (Florida School Laws, Chapter 228, 1990).

Research has indicated that many students live in poverty and that poverty places the student at risk for failure (Hewett & Forness, 1984). Several investigators

supported these assertions. For example, Hodgkinson (1985) reported more than one in five school children come from families living in poverty. In addition, Shoenmyen (1988) and the National Education Association (1989) stated 75 percent of Florida's 1987 dropouts were students living in poverty. The dropout rate for males was 58 percent compared to 42 percent for females. Gustafson (1989) also indicated that in 1987 more juveniles under the age of 18 were arrested than graduated from high school and that many of these students were from poor families.

With the number of families living in poverty increasing, as well as the demands for academic excellence, it is anticipated that failure and dropout rates will continue to rise (Hodgkinson, 1985; Knujufu, 1990; Ogbu, 1990). Although failure rates tend to be higher for Black males and males from impoverished families, some researchers have found that irrespective of the impoverished backgrounds of male students, differences in the academic performance of Blacks and Whites still exist (Cole, 1983; Comer, 1990; Knujufu, 1990; National Research Council, 1989; Nettles, 1988).

Race

According to research, Black males experienced academic failure at a greater rate than White males, and Black males were also more susceptible to dropping out of school. Cole

(1983) reported the dropout rate for the 1982 school year for Blacks was 28 percent compared to 17 percent for Whites. Blacks' academic achievement levels were also 2 or more years behind national norms. Poussaint (1983) also reported Blacks represented a disproportionate number of students experiencing academic failure when compared to other groups.

Baratz (1986) conducted further research and found that Black males dropped below grade level in elementary school and fell further behind until, at age 16, at least 35 percent were below their model grade, when compared to Whites. In addition, Baratz-Snowden (1987) indicated that in 1984 half of the Black males 18 to 19 had not graduated from high school compared to Whites and other groups.

Nettles (1988) reported that differences in the academic performance of Blacks and Whites were apparent well before they entered high school. Blacks repeatedly scored lower on standardized tests than other groups, and many Blacks did not believe they were as smart as Whites so did not work hard at learning. Ogbu (1990) also asserted that feelings of inferiority and self-defeat tend to discourage Black males from working up to their potential.

Kunjufu (1990) conducted additional research and found a disproportionate number of Black males were placed in slower reading groups and special education programs. Black males also comprised 85 percent of the students in special education classes but only 4 percent of the students in the

gifted and talented classes. According to Ogbu (1990), differences in the academic performance of Blacks and Whites have narrowed since the 1970s, but Blacks have continued to lag well behind Whites in their academic achievement, standardized tests, and college enrollment.

Several researchers have supported the premise that increased poverty and academic failure have influenced student enrollment in institutions of higher learning. For example, Collison (1987) reported a decline in the number of Black students enrolled in college but an even greater decrease in the number of Black males. Gustafson (1989) also reported Florida has the highest school dropout rates in the nation. During the 1987-88 school year, more males dropped out of school and went to prison than enrolled in institutions of higher learning.

Some researchers have also found that differences exist in the type of preparation Black and White students receive for college enrollment. For example, Baratz (1986) reported that in 1980, 32 percent of Black students were enrolled in an academic track compared to 42 percent of Whites. Nettles (1988) also indicated the number of Black students taking college preparatory courses had dropped even more by 1987. Keller (1989) further indicated there has been a 35 percent drop in the number of Blacks taking the Graduate Record Examination (GRE), and the mean score for Blacks was considerably lower than the mean score for Whites.

Causes of Failure

Regardless of the number of students failing or their ethnic background, all students make attributions regarding the cause of their failure (Weiner, 1980, 1984). The research findings of several investigators indicated that students frequently attribute their failure to either lack of ability or lack of effort. For example, Rich and Hyatt (1981) investigated developmental trends in children's attributions for success and failure in achievement and social situations. Twenty-four second graders, 21 fourth graders, and 24 sixth graders participated in the study. Students attributed success to effort and ability and failure to lack of effort and ability.

Taliuli and Gama (1986) also assessed the causal factors elementary students attributed their success and failure to in the performance of academic tasks. Two hundred thirty-seven low socioeconomic-status fourth graders participated in the study. The students with a history of academic success attributed their success to effort and ability and were more capable of performing well than the children with a history of failure. Failing students did not believe in their ability to succeed and viewed their failure as a lack of effort and ability.

Students' Response to Failure

Although several researchers have found students frequently attribute their success and failure to ability and effort, Diener and Dweck (1980) found students with histories of success or failure respond to their achievement differently. For example, students who had experienced academic success developed high concepts of ability, whereas students who had experienced failure developed low concepts of ability.

Students who had high concepts of their ability did not perceive failure as failure and accepted corrections as useful information rather than evaluations of incompetence. On the other hand, students who had low concepts of their ability tended to avoid achievement situations, gave up easily, and devalued their performance when successful. In addition, the students who had low concepts of their ability did not view success as predictive of future success, tended to exaggerate their failure, and did not believe they could increase their achievement by increasing their effort (Diener & Dweck, 1980).

The research by Ames and Ames (1981) supported the findings that students who experience failure felt threatened and were afraid to risk trying again to achieve academic success. Their desire to avoid failure became stronger than their desire to achieve. Harari and Covington (1981) also found that students who repeatedly failed to attain academic

success slowly lost confidence in their ability to ever succeed academically. Once students accepted failure and were convinced they were incompetent, they gave up the struggle for self-regard through the attainment of high academic achievement.

Stevens and Pihl's (1982) investigation supported previous research. In a sample of 337 failing sixth graders of normal intelligence, researchers found that once students accepted failure, they were less productive in performing academic work and more anxious than their more successful peers. The failing students became vulnerable to the stress of failure and remained at risk for future failure. Thus, the longer the student's history of repeated failure, the more difficult it was to assist the student in overcoming expectations for future failure (Dweck, 1983).

Strategies to Cope with Failure

Research has indicated when students experience repeated failure, they frequently resort to defensive strategies to protect their sense of worth (Covington, 1984). For example, students might avoid academic work by not trying or by making excuses or tend to set unrealisticlly high-achievement goals to shift the causes of failure from ability to lack of effort (Ames & Ames, 1981). Ability is widely perceived as a major cause of success, and success in turn signifies worthiness (Covington, 1984). Teachers also tend to foster students'

perceptions that worthiness is accomplished from academic success because academic success is reinforced (Covington & Omelich, 1981).

Effort was also perceived as an important source of worthiness. When a student tried hard and failed, the student experienced a loss of self-esteem. A loss of self-esteem placed the student at a greater risk for future failure. Combinations of high effort and failure led to suspicions of low ability. When students suspected they had low ability, they felt incompetent. This feeling triggered shame and humiliation. When they experienced shame and humiliation, students exerted some effort to avoid punishment and feelings of guilt, but not so much effort as to risk incompetency-linked humiliation should they try hard and fail anyway. Because of students' perceptions of the importance of ability to achievement and self-esteem, when forced, students chose the consequences of guilt rather than humiliation related to incompetency and failure (Covington & Omelich, 1980, 1982).

The research by Brown and Weiner (1984) supported the findings that students preferred their achievement to be caused by ability rather than effort, and that effort placed students at risk for failure and loss of self-worth. Once students accepted failure, teachers had difficulty helping them to overcome the debilitating effects of past failures.

Relationship Between Academic Failure and Motivation

Motivation was defined as a student's willingness to perform tasks without visible external pressure to do so and when other behavior alternatives were available (Allen, 1982). Researchers have found a strong correlation between academic failure and a decrease in students' motivation to perform academic tasks. Beck and Muia (1980) investigated students who had failed and found when students receive poor academic grades, the failure created feeling of alienation. Students were also less motivated to perform the academic work. Hubbell (1980) also found that students who continuously experienced academic failure were prone to demonstrate low motivation to perform academic tasks.

Bandura and Schunk's (1981) research on efficacy perceptions indicated that motivation was greater in students who believed they had the competence needed to succeed on a task than students who lack confidence in their ability to succeed academically. Allen's (1982) investigation of failing students supported previous findings. In a sample of 168 fifth and sixth graders, the attributions or causal factors for students' failure played an important role in motivating students to continue to perform academic tasks. Students who attributed their failure to lack of ability were less motivated to continue performing academic tasks.

Feather (1982) indicated a student's motivation to learn was dependent upon the degree to which students valued

participation in the task itself or the rewards students received from successful completion of the task. Gjesme (1983) provided support for this premise. Five hundred twenty-four sixth graders' achievement motives, achievement level, future time orientation, sex, and perceived importance of school activity were investigated in relation to approach-avoidance motivation. Success-oriented students had the highest approach motivation. Dweck and Elliott (1983) also found that motivation was greater in students who set goals of moderate difficulty levels, pursued their goals, and concentrated on achieving success.

According to Wlodkowski (1984) students' desire and motivation to learn were influenced by the work they did and the expectations and feedback received from teachers and other students. Brophy (1987) further concluded that students were more motivated to perform academic work if they believed they could succeed if reasonable effort was applied. Students were less motivated to perform academic tasks when they were convinced they would fail regardless of their effort. Thus, motivating students to learn can be stimulated by linking successful task performance to valued rewards for good performance.

Behavior Problems

Kauffman (1989) indicated that a strong relationship existed between students' low academic performance and

classroom behavior problems. DeRidder (1990) also indicated that behavior problems or students' noncompliance with classroom rules occurred because of the severe sense of frustration failing students experienced when their educational needs were not met. The message failing students received was one of rejection, which, in turn, created rejection of school in students. In addition to the frustration and rejection students experienced because of academic failure, researchers found that the attitudes and expectations of teachers toward failing students influenced students' behavior in the classroom.

The research on teachers' attitudes and expectations toward low-performing and failing students indicated teachers perceived these students as more difficult to teach (Kauffman, 1989; Weiner, 1980). Several researchers have supported this premise. For example, Kauffman (1989) found that negative attitudes of teachers toward failing students with behavior problems reinforced students' perceptions of themselves as worthless. Teachers were reported as displaying negative attitudes when they rejected students and overemphasized students' weak skill areas.

Coleman and Gilliam (1983) also found that regular teachers in an elementary school tended to display more negative attitudes toward low-performing and failing students who behaved aggressively in class than they did toward students who just withdrew from social contact. Lewin,

Nelson, and Tollefson (1983) found similar results. Teachers tended to exhibit more negative attitudes toward failing students who were disruptive in the classroom than they did toward disruptive students who were academically more successful.

Strain, Lambert, Kerr, Stagg, and Lenkner (1983) also found that teachers exhibited more negative attitudes toward students who were poorly adjusted in school than they did toward other students. For example, teachers seldom reinforced appropriate behavior of failing students with behavior problems, and their feedback to these students was frequently negative. Often failing students' behavior and academic difficulties became worse.

In yet another study, Johnson and Blankenship (1984) examined the attitudes of teachers toward students with behavior problems. Teachers tended to have negative views of low-performing and failing students, especially if students were aggressive or disruptive in class.

In addition to teacher attitudes, several researchers found that teacher expectations influenced students' academic performance and behavior in the classroom. Hersh and Walker (1983) and Walker and Rankin (1983) examined the expectations and standards of elementary school teachers that were critical for academic success. Students with externalizing problems who acted out aggressively had difficulty meeting teachers' expectations and standards for academic success.

Walker (1986) also reported that teachers who had a poor tolerance for low-performing students with behavior problems were prone to resist the placement of these students in their classroom. When these students were placed in resisting teachers' classrooms, they were often not encouraged to become engaged in the learning process.

Gama and de Jesus (1986) investigated teachers' expectations of schooling and their causal attributions regarding the academic performance of their students. Four hundred fifty-one elementary school teachers participated in the study. Teachers were found to hold high expectations of schooling for successful students and low expectations for unsuccessful students. These teachers also attributed student academic success to effort, family interest, and the teacher's skill in teaching and relating to students and attributed academic failure to lack of student effort, lack of family interest, and the failure of students to do school work.

Bandura (1986) pointed out that students were great imitators. They mimicked and observed teachers constantly. Teachers' attitudes and actions in the classroom strongly influenced the way students approached their academic work and behaved. If the perceptions and expectations of teachers were negative toward low-performing and failing students and the teachers were unsupportive of these students' efforts, then the problems of failing students were compounded. The

negative attitudes of teachers served to reinforce failing students' perceptions of themselves and their work as inadequate.

To prevent regular teachers from developing negative attitudes toward low-performing students with behavior problems and low-performing students from emulating the negative attitudes of teachers, regular education teachers can use positive intervention strategies, such as contingency contracts (Murphy, 1985). Contingency contracts have been used by special education teachers as a tool to motivate students and help them assume personal responsibility for learning and behavior (Murphy, 1988).

Relationship Between Behavior and Learning

Several researchers have studied the relationship between student behavior problems in the classroom and academic failure, as well as teacher behaviors exhibited in the classroom that have contributed to increased student misconduct and learning problems. J. L. Epstein (1981) examined anecdotal and descriptive records of teachers and found enough evidence to support that when teachers were insensitive toward students in the classroom, students tended to develop behavior and learning problems. Also, teachers who repressed students' individuality, demanded uniformity in their academic performance, and disregarded students'

learning styles and rates contributed to the learning and behavior problems displayed by students.

Mayer, Nafpaktitis, Butterworth, and Hollingsworth (1987) reported similar findings. When the school environment was punitive, the teacher was insensitive to the individual needs of students, teacher demands were excessive and inflexible, and students were forced to conform to the same academic and behavioral requirements, students tended to respond with resentment, hostility, vandalism, and passive resistance to classroom rules. They also found high correlations between vandalism and punitive school environments that did not recognize individual differences. Reasonable rules must be maintained for safety and the well being of all, but excessive and inflexible demands were resented by students.

Insensitivity to students' needs was not the only factor that was found to influence students' learning and behavior in the classroom. Researchers also found that task difficulty and academic failure influenced students' academic performance and behavior in the classroom.

Center, Deitz, and Kaufman (1982) found when low-performing students were presented with tasks that were too difficult, frustration occurred and students tended to display disruptive behavior in the classroom. As the difficulty level of tasks increased, so did students' disruptive behavior. Curtis and Meyers (1983) also found

that failing students had five times as many serious behavior problems as students who had not experienced academic failure.

Sandoval and Hughes (1982) investigated the academic failure of a group of first graders. They found that the behavior problems of these students did not improve even when the students were retained. Kuppersmidt and Patterson (1987) also investigated the academic performance of second through fifth graders. In a sample of 1,449 students they found one-third of the students who had three or more social problems scored below the 25th percentile on standardized achievement tests. Fewer than 10 percent of students who had no social problems obtained such low achievement scores. Social problems were defined by teacher and peer ratings of aggressive behavior, shy withdrawn behavior, peer rejection, depression, low self-esteem, low parental involvement in education, and poor grooming and personal hygiene.

Other researchers have found that the characteristics of low-performing students with behavior problems placed these students at an even greater risk for failure. Hess and Holloway (1984), Shinn, Ramsey, Walker, Stieber, and O'Neill (1987), and Walker and McConnell (1988) investigated the characteristics of low-performing students with behavior problems and compared their characteristics with those of high-achieving students with no behavior problems. Low-performing students with behavior problems had traits

that were different from their high-achieving peers. The traits of low-performing students with behavior problems did not facilitate learning or allow positive relationships to develop between these students and their teacher and peers.

The Need for Self-Esteem

Self-esteem was defined as the value a student places on self and is based upon beliefs about the self, others, and the world in general and is a result of real-life experiences with significant others (Magee, 1987; Metcalfe, 1981). Students try to behave in ways to maintain confidence, high opinions of self, and to gain recognition from others. Students are able to maintain these feelings through achievement, competence, and mastery of their world. When students are unable to meet these needs, they develop feelings of insecurity and inferiority and a concern about personal worth (Covington, 1984; Ogbu, 1990; Rose et al., 1983).

Research indicated academic failure has a negative effect on students' self-esteem. Rose et al. (1983) reported failure led to students' developing feelings of frustration, apathy, unhappiness, behavior problems, and poor-self-esteem. Hahn (1987) also found that when students experienced failure and were held back a grade, they also experienced a loss of self-esteem and felt powerless, stigmatized, and helpless when confronted with academic tasks. These students were

four times more likely to drop out of school than students who had never failed.

Several researchers have investigated the relationship between self-esteem and academic performance. Byrne (1984) found few studies to support a statistical relationship between these two variables but believed self-esteem had properties that were motivational. Changes in self-esteem led to changes in the student's academic achievement. Marsh (1988) supported the assertion that self-esteem was motivational and could be mediated through constructs such as effort and persistence. Thus, self-esteem was more likely to affect school grades than standardized test scores. Hadley (1988) provided further support for this finding by investigating the effects self-esteem had on improving the reading scores of elementary students. The sample consisted of 165 male and female students in seven second-grade classrooms from one elementary school. Using an affective curriculum to improve students' self-esteem, significant gains were found in the students' reading scores.

Other researchers have found that interventions used to improve self-esteem also produced gains in students' academic performance. Zeeman (1982) found an increase in students' academic performance after improvements were made in students' self-esteem. The sample consisted of 10th and 12th graders and 2nd and 3rd graders. Although improvements were made for all groups, the greatest gains occurred in the

psychology class treatment versus tutoring teaching and a combination of the psychology course and the tutoring teaching. Wooster and Carson (1982) also found that when students were taught social and communication skills, improvements were made not only in self-esteem but in the reading scores of students.

Jackson (1983) also conducted research on Black rural students in fourth and fifth grade and found that after students had participated in a values clarification curriculum, they showed significant improvements in both their self-esteem and reading scores. Further research was conducted by Wanat (1983). The usefulness of a 16-week social skills program in changing the self-esteem of learning disabled adolescents was examined. Results indicated an improvement in students' self-esteem. Gurney (1987) also raised the self-esteem of maladjusted boys using behavior modification techniques. A sample of 14 maladjusted boys aged 10 to 12 years was provided positive self-referent verbal statements of a 6-week period of time. The positive statements yield a significant increase in the students' self-esteem. Their academic performance also improved.

According to Covington (1984), a student's self-esteem or personal worth depends primarily on the student's ability to accomplish academic goals. Because ability was viewed as a critical component of success, the student's

self-perceptions of ability became a significant part of the student's self-definition.

When students performed poorly in school and experienced academic failure, they lost their sense of value and self-esteem. When students' self-esteem was reduced, students felt shame and humiliation (Covington, 1984). However, low-performing and failing students could still maintain self-esteem and worth if they tried hard and were reinforced for their efforts. Self-esteem could also be changed with effective interventions that were positively associated with academic performance (Gettinger, 1988).

The Need for Effective Intervention Strategies

Effective intervention strategies are methods employed by teachers to respond appropriately when problems occur, as well as methods used to prevent problems from occurring. Effective intervention strategies also allow teachers to create and maintain a classroom environment that fosters learning and appropriate behavior (Evertson & Emmer, 1982).

Traditional interventions used by regular education teachers to address the academic and behavior problems of students in the classroom were reactive and action-oriented in nature. Such interventions consisted of providing counseling, logical consequences, problem solving, remediated instruction, retention, social promotion, assertive

discipline, and teacher effectiveness training (Emmer et al., 1980; Gettinger, 1988; Safer, 1982).

Safer (1982) investigated the types of interventions used by regular education teachers with problem students. Results indicated that the strategies used by regular education teachers were frequently ineffective in reducing behavior problems in the classroom and improving failing students' achievement levels and self-esteem. Yet, several investigators have provided support for the premise that intervention strategies that were effective in helping teachers manage their classrooms and keep students engaged in learning were also positively related to students' progress in the acquisition of academic skills (Brophy, 1981, 1986; Brophy & Good, 1986; Doyle, 1986; Lentz & Shapiro, 1985).

Intervention Strategies for Classroom Management

Speltz, Shinamura, and McReynolds (1982) examined two types of contingencies and their effect on students' behavior in the classroom. Results indicated that students' positive social interactions and academic productivity increased when contingencies were used to manage students' behavior. In another investigation, Van Houten, Nau, Mackenzie-Keating, Sameoto, and Colavecchia (1982) found when students' disruptive behaviors in the classroom were continually reprimanded and controlled, the effect was an improvement in their academic performance. Witt, Hannafin, and Martens

(1983) conducted further research in which homebound contingencies were used. They found when students' disruptive behaviors in the classroom decreased, the academic productivity increased.

Other researchers have examined the use of reinforcement interventions and their effect on the students' behavior and academic performance in the classroom. Gickling and Thompson (1985) researched the use of contingencies and exchangeable reward points for students' on-task behavior. Results indicated students' on-task behavior increased when contingencies and exchangeable reward points were offered. However, their on-task behavior decreased when the assignments were too easy or too hard. Hoge and Andrews (1987) also examined management interventions that reinforced some aspects of academic productivity, such as problems attempted and accuracy rate. Results indicated that interventions that reinforced on-task behavior produced changes in more global measures of academic achievement.

Research has also provided support for the premise that intervention strategies that were positive and reinforced student academic performance and behavior in the classroom tended to be effective in facilitating learning (Gettinger, 1988). Contingency contracts provide an example of a positive intervention strategy that has been used primarily by special education teachers in assisting students to accomplish both learning and behavioral goals (Murphy, 1988).

Contingency Contracts

Contingency contracts are based upon the theoretical constructs underlying Skinner's operant research and principles of behavior change. Contracts provide an if-then arrangement whereby highly preferred activities or consequences are provided to students only if they perform specific behaviors under specific conditions (Mercer & Mercer, 1985; Murphy, 1988).

Contingency contracts also allow students choice, as well as allow teachers to work with students in positive ways to manage students' academic and behavior problems in the classroom (Kelley & Stokes, 1982; Mercer & Mercer, 1985; Murphy, 1988; Smith, 1984). Although several researchers have indicated contingency contracts can be used as an effective intervention strategy to motivate students to learn academic material, improve students' classroom behavior, and their self-esteem, the literature indicated contingency contracts were used more often with high school and special education students and involved in-tact classrooms or single case studies (Kelley & Stokes, 1982; Murphy 1988).

Becker et al. (1967) studied the contingent use of teacher attention and praise in reducing classroom behavior problems of 10 urban elementary special education students. Students showed less deviant behavior during the treatment phase. However, differential teacher attention and praise were not very effective with two students.

In another study, Cantrell et al. (1969) used contingency contract procedures to manage behavior problems of special education students enrolled in first through eleventh grades. Written contracts delineating remediative changes in reinforcement contingencies were prepared. Contracts specified specific ways the child could obtain reinforcers contingent upon approximations to desired appropriate behaviors chosen as incompatible with the referral problem behaviors. Some improvement was noted, but further experimental analysis was recommended.

In a third study, Kazdin (1973) examined the role of instruction and contingent reinforcement in changing the deviant behavior of 147 students in six elementary school classrooms. Students participated in the study for 9 weeks. Two first-, third-, and fourth-grade in-tact classrooms were selected. Information about reinforcement contingencies were given to some classes and withheld from others, and reinforcement was made contingent upon performance for some classes and not for others. Contingent reinforcement was effective in altering behavior. Instructions did not augment the efficacy of contingent reinforcement.

In a fourth study, Arwood, Williams, and Long (1974) compared the effectiveness of written contracts and teacher proclamations (i.e., explicitly stated rules) in increasing appropriate social interaction behaviors. They examined the behavior of 28 high school students in a ninth grade English

class. The results indicated appropriate behaviors occurred at a rate of 89 percent under contracting conditions and 76 percent under proclamation conditions when compared to a baseline of 70 percent.

Diaddigo and Dickie (1978) also conducted a study to examine the use of contingency contracts in eliminating inappropriate classroom behavior. Their research involved a single case study of a 10-year-old boy from a private residential school for emotionally disturbed students. The results showed immediate improvement in the student's classroom behavior following the introduction of a contingency contract allowing the student to earn biweekly home visits. The home visits were contingent upon appropriate classroom behavior (e.g., remaining in assigned area). The results also indicated that a token system allowing free time and other privileges had previously been unsuccessful in reducing this student's inappropriate behaviors.

In another study, Gundel (1981) examined the efficacy of three behavioral interventions for reducing the disruptive behavior of 36 emotionally disturbed boys enrolled in a special education classroom. The students had a mean age of 9 years. Results indicated that contingency contracts were significantly more effective than either self-regulation or teacher regulation combined with self-regulation. The self-regulation technique involved self-assessment, self-

recording, partial self-determination of reinforcement, and self-administration or reinforcement. In the combination technique, the teacher regulated these components during the first week, and the self-regulation program was employed the second week.

The research on the use of contingency contracts in the classroom has been applied to other areas of concern besides behavior in the classroom. For example, individuals interested in contingency contracts as intervention strategies have investigated their use with such topics as academic productivity, academic performance accuracy, on-task behavior and task completion, study rate, and school attendance. The following studies relate to these areas and demonstrate the wide variety of problems that contingency contracts have been successfully used to address.

In a final study examining disruptive classroom behavior, Murphy (1985) used contingency contracts and differential reinforcement of low rates of behavior to reduce disruptive behavior in the classroom of one student. The research involved a single case study of a sixth-grade boy who displayed disruptive behaviors of talking out and hitting other students in class. The frequency of this behavior occurred as often as 63 times per day during baseline. Substantial reduction of the disruptive behavior occurred across three classroom settings. The student's misconduct

was reduced by 79 percent during the contracting intervention period.

In a single case study investigating academic productivity, Lovett and Curtis (1969) examined the effects of self-imposed contingencies versus teacher-imposed contingencies on the academic response rate of a 12-year-old student. The student was enrolled in a class for children with behavioral disorders. Higher academic rates occurred when the student arranged contingency requirements than when the teacher specified them.

In another study examining academic productivity, Poppen and Thompson (1971) investigated the effect of grade contracts on student performance. One hundred and ten college students from four educational psychology classes participated in the study. Students in the experimental group were evaluated by a grade contract approach, and students in the control group were evaluated by a traditional method. Differences were not statistically significant even though group differences favored the experimental group.

In a third study, Kirby and Shields (1972) conducted a single case study to examine the arithmetic response rate of a seventh-grade student when praise and immediate correct feedback were provided. The findings indicated the student's arithmetic response rate and percentage of time spent in attending behavior increased when praise and immediate correct feedback were provided. Removal of the treatment led

to decreases in both response rate and attending behavior. Reinstatement of the procedure again produced increases in both types of behavior.

In a fourth study investigating the effects of contingency contracting on academic productivity, Williams and Anandam (1973) awarded disadvantaged seventh-grade junior high school students points for academic and social behaviors during a 9-week grading period. Grades of students under contract increased. Grades of a similar control group declined slightly.

In another study, McCarty et al. (1977) applied group-oriented contingencies to increase the arithmetic problem-solving rates of four behavior-disordered adolescent residents in a psychiatric hospital. The results indicated consistent increases in the subjects' arithmetic computation rates as a function of group-oriented contingencies.

In the last study investigating academic productivity, Kelley and Stokes (1982) examined the effects of contingency contracting on students' completion of workbook items in math, reading, and English in an alternative education setting. Their research involved 13 students between the ages of 16 and 21 who had dropped out of regular high school. The results indicated students' productivity more than doubled during the contracting period as compared with their productivity prior to contracting.

In a study investigating on-task behavior, disruptive behavior, and daily assignment completion, White-Blackburn, Semb, and Semb (1977) examined the effect of behavior contracts on these behaviors. Four sixth-grade students were presented with a list of good conduct and assignment completion goals and a list of disruptive behaviors coupled with a list of rewards and penalties that could be earned. On-task behavior and daily assignment completion increased, weekly grades were higher, and disruptive behavior decreased when the contract was in effect.

In a similar study investigating on-task behavior and task completion, Kline and Mechelli (1983) compared the effects of contingent teacher attention plus the use of a study carrel with contingency contracting of on-task behavior and task completion. The research involved a single case study of a first grade girl. The results indicated that while both interventions were associated with increased on-task behavior (i.e., looking at or manipulating task materials), only the contracting intervention resulted in greater task completion. During the 12-day contracting period, the student successfully completed all three daily assignments compared to only one during the entire 5-day teacher attention, study carrel condition.

In a different study, Bristol and Sloane (1974) examined the effects of contingency contracting on the study rate and test performance of 36 college students who volunteered from

an introductory psychology class. Contingency contracts significantly increased the students' study rate but were only selectively effective in improving the test performance of below-average students.

In yet another study, McDonald, Gallimore, and McDonald (1970) examined the effects of contingency counseling on school attendance. During the first study, six ninth-grade students enrolled in a special motivation class and identified as chronic nonattenders participated in the study. Reinforcers were provided contingent on school attendance. The results showed a significant increase over the baseline data for school attendance during the time in which contracts were in effect. The second study involved 20 10th-grade chronic nonattenders, using the same procedures as in study one, compared with 15 high school seniors identified as nonattenders who were provided more traditional attendance counseling. The results were similar to those achieved in study one. The 15 nonattenders did not achieve improved school attendance.

According to the available research, contingency contracts were used as an effective alternative strategy that provided a positive approach to facilitate student learning and desirable student conduct. Also, contingency contracts were highly motivating because students shared equal involvement in the process of selecting goals and rewards. Supportive research indicated that students who have input

into arranging reinforcement contingencies at school were likely to perform better than students with little or no opportunity for such involvement (Kazdin, 1980).

Rashke, Stainback, and Stainback (1982) compared the predictive capabilities of parents, teachers, and students in selecting appropriate rewards. The results indicated a significant discrepancy between the reward preferences of students and the rewards actually used by educators. According to this study, the only group that can accurately predict an anticipated reward is the student group. Since the key to the effective use of reinforcement systems is the selection of the reinforcers, it is imperative that students be active participants in the selection process (Smith, 1984).

Several writers have cited that active teacher involvement in the development of classroom-based interventions was also beneficial. Such involvement strengthened teacher ownership of the intervention and thereby promoted more accurate, conscientious implementation (Curtis & Meyers, 1985; Idol-Maestas, 1983). They believed that teachers who had an active role in developing an intervention would make reasonable efforts to implement the intervention as originally designed.

Despite the available research that has provided support for contingency contracts as an effective intervention strategy to address the learning and behavior problems of

students in the classroom, the use of this strategy by regular education teachers still lacks empirical validation. In fact, regular education teachers tend to rate their knowledge in the use of effective intervention strategies as highly inadequate (Gettinger, 1988; McKee et al., 1987) and have expressed a need for more empirical research to assist them in choosing effective interventions (Bardon, 1987; Murphy, 1988).

In Chapter II the researcher has provided a review of the research literature relevant to the purpose of this study. Chapter III contains the methodology procedures for implementing this study.

CHAPTER III
RESEARCH METHODOLOGY

The purpose of this study was to investigate the use of contingency contracts as an effective intervention strategy to motivate low-performing Black and White male students to achieve academically. A second purpose was to determine if the use of contingency contracts would have a positive effect on their academic achievement, classroom behavior, and self-esteem. And, third, how student race affected these variables.

Chapter III contains an explanation of the research methodology and procedures used in the study. The chapter has been divided into four major sections: (a) Subjects, (b) Procedures, (c) Instrumentation, and (d) Data Analysis.

Subjects

Permission to Conduct Study

Prior to the implementation of this study, permission was gained from the following sources: (a) the University of Florida Human Institutional Review Board, (b) Levy County School System, (c) parents/guardians of eligible students, and (d) eligible students. Follow-up contacts were made by

the researcher to parents and students who did not return the permission requests (see Appendix A for sample letters).

Selection of Subjects

Eligibility for student selection to participate in this study was determined on the basis of the following criteria: (a) Students had to be low-performing Black and White males with a 2.75 or less cumulative grade point average in reading, math, science, social studies, and language, (b) enrolled in the fourth or fifth grade in a regular education classroom, (c) had normal intelligence, (d) did not meet the Department of Education requirements for exceptional student education services (ESE), (e) maintained regular attendance.

Students' duplicate report cards and attendance records were reviewed for grade point average and attendance in school. Students with a record of excessive absences, eight or more during a 6-week period, were deleted from the eligibility list.

In addition, the Cognitive Skills Index (CSI) from the Comprehensive Test of Basic Skills (CTBS) was reviewed to determine the student's level of potential and capability of performing on-grade level academic work. This test is administered yearly to all students in Levy County. If the student's CSI fell two standard deviations below the mean, based on a normal distribution with a mean of 100 and a standard deviation of 15, the student was deleted from the

eligibility list. Students remaining on the list comprised the eligibility list for random assignment of students using a table of random numbers.

Population

The population for this study consisted of 72 low-performing Black and White males in the fourth and fifth grades from three rural public elementary schools in Levy County, Florida. Low-performing males were selected because research has indicated that males, as a group, perform at a lower academic achievement level than females (Knujufu, 1990).

The socioeconomic status of the student population in the three schools ranged from low to middle class, and the mean age for the fourth and fifth graders was 9.5 years. The student population in the three schools was also racially integrated, and the male to female ratio was approximately equal. However, Black males represented 8 to 10 percent of the student population compared to 37 to 40 percent for White males.

Sample

The sample consisted of 72 low-performing Black and White males randomly selected from the pool of eligible students and assigned to experimental and control groups. At each of the three schools, 12 Black males were randomly

assigned, 6 to an experimental and 6 to a control group. Also, 12 White males were randomly assigned, 6 to an experimental and 6 to a control group at each school (see Appendix B for sample research design).

At each school, students in the experimental groups received the contingency contract treatment, and students in the control groups continued to receive the routine classroom instruction during the implementation period.

Research Design, Hypotheses, and Research Questions

An experimental randomized pretest-posttest control group design was used for this study (Isaac & Michael, 1982). Randomization techniques, administered systematically, enabled the researcher to assume that at the time of assignment, groups were equivalent.

The randomized pretest-posttest control group design was chosen because it controls for most of the threats to internal validity. Such a design controls for selection bias, history, maturation, statistical regression, and instrumentation when the same procedures and instruments are used for the same groups (Borg, 1987).

The three independent variables were contingency contract treatment, race, and school. The pretest scores served as the covariate and the posttest scores serve as the dependent variable.

Hypotheses

Nine hypotheses were proposed for testing in this study. For all hypotheses, the dependent variable was the adjusted posttest score for the covariate or pretest score.

H_1 No significant difference will exist between the adjusted mean posttest scores for the measure of academic achievement for low-performing students who receive contingency contracts when compared to low-performing students who do not receive contingency contracts.

H_2 No significant difference will exist between the adjusted mean posttest scores for the measure of classroom behavior for low-performing students who receive contingency contracts when compared to low-performing students who do not receive contingency contracts.

H_3 No significant difference will exist between the adjusted mean posttest scores for the measure of self-esteem for low-performing students who receive contingency contracts when compared to low-performing students who do not receive contingency contracts.

H_4 There will be no school and treatment interaction effect on the measure of academic achievement for low-performing students.

H_5 There will be no school and treatment interaction effect on the measure of classroom behavior for low-performing students.

H_6 There will be no school and treatment interaction effect on the measure of self-esteem for low-performing students.

H_7 There will be no race and treatment interaction effect on the measure of academic achievement for low-performing students.

H_8 There will be no race and treatment interaction effect on the measure of classroom behavior for low-performing students.

H_9 There will be no race and treatment interaction effect on the measure of self-esteem for low-performing students.

Each hypothesis was tested separately at alpha = .05 for the variables of academic achievement, classroom behavior, and self-esteem.

Procedures

Teacher Training

The classroom teachers of the fourth- and fifth-grade males participating in the study were trained by the researcher to implement the contingency contracts in each of the three elementary schools. A total of 21 teachers participated in the study. During training, teachers were informed they were participating in an experimental research study targeting Black and White low-performing male students for a 6-week grading period. Their responsibility during the study was to (a) explain the contingency contract process and goals to students in the experimental group, (b) monitor students' progress toward contract goals, (c) explain the reward criteria and delivery of rewards to students, and (d) keep track of contracts, goals, and rewards during the entire implementation period. Teachers were also responsible for completing the Achenbach Child Behavior Checklist for students in both the experimental and control groups during pretesting and posttesting.

During training, teachers were given a sample contract, and the researcher explained procedures for completing the contract form. Teachers were also provided a copy of a script they were to use when discussing with students' their progress toward accomplishing the contract goals (see Appendix C for sample script). Teachers practiced reading the script to become familiar with it. In addition, teachers were provided a copy of the Achenbach Child Behavior Checklist, and the researcher trained them in procedures for completing this test. All teachers were provided the same training to assure that the same procedures were used with all students in the study.

Contingency Contracts

Contingency contracts were based on an if-then arrangement whereby highly preferred activities or consequences were provided to students only if they performed specific behaviors under specific conditions (Murphy, 1988). Students assigned to the experimental group made a written contract with the classroom teacher to achieve three academic and one behavioral goal daily for 1 week in order to receive a reward and bonus reward. If students failed to achieve the specific goals, the rewards were withheld.

Contingency contract forms were designed to cover five academic subjects (i.e., reading, math, science, social studies, and language) and four goals daily for a week. The

contract forms also allowed teachers easy access to monitor and record student progress in academic subjects and goals.

The contract forms were developed and provided to the teacher by the researcher (see Appendix D for sample contract form). Students were instructed to tape their contracts to their desk. At the end of each week, students were given new contract forms. The goals remained the same, but students were allowed to choose their reward and bonus from the reward list. Teachers collected and kept all contract forms during the implementation of the treatment.

Contract Goals

Four daily goals were addressed on the contingency contract forms for students to accomplish. Such goals included (a) begins academic task, (b) completes academic task, (c) completes academic task with 85 percent accuracy, and (d) follow rules. These four goals were the same for all students in the experimental groups.

Rewards

Rewards were provided to students in the experimental groups contingent upon completion of the four goals. When students made their contract with the teacher, students were allowed to choose a weekly reward and bonus from the reward list. Researchers found that choice was a powerful motivator, and the key to effective use of reinforcement

systems was the selection of rewards. Therefore, it was important that students were active participants in the selection of their rewards (Rashke, Stainback, & Stainback, 1982).

Students were able to earn rewards and bonuses under the following conditions:

1. If the student accomplished all four goals daily for 1 week, the student received the identified reward and bonus.
2. If the student accomplished the first three academic goals daily for 1 week, the student received the identified reward but not the bonus.
3. If the student accomplished less than three academic goals daily for 1 week, the student did not receive the identified reward nor the bonus.

The reward list and rewards were provided to the teacher by the researcher. The reward list was adapted from Walker and Shea's (1984) reinforcement list (see Appendix E for sample reward list).

Pretesting

Once students were randomly selected and assigned to experimental and control groups and teachers were trained to implement the contingency contract procedures, students in both the experimental and control groups were pretested on the same dependent variables (i.e., self-esteem and classroom

behavior). The researcher administered the Piers-Harris Self-Concept Scale. This scale was administered in 15 to 20 minutes.

The teachers completed the Achenbach Child Behavior Checklist (CBCL), which takes approximately 10 to 20 minutes to complete. The CBCL forms were picked up by the researcher and computer scored. Scores from the Piers-Harris, the CBCL, and students' cumulative grade-point averages were kept by the researcher to be later compared with the posttest data and analyzed using the analysis of covariance (ANCOVA). Students were assigned numbers to protect their identity and confidentiality of scores.

Monitoring

The classroom teachers had responsibility for monitoring contingency contract goals and delivery of rewards. Teachers met individually with students in the experimental group on Thursdays, during the last 30 minutes of the school day, to discuss students' progress toward achieving the contract goals. Rewards were delivered in accordance with the terms of the contract.

Teachers made new contracts with students weekly, keeping the same contract goals. Only the students' choice of rewards changed, depending on the selection by the students. Teachers collected the old contracts and kept them

during the 6-week grading period. This process continued for the duration of the implementation period.

The researcher trained the classroom teachers and provided them with the contract forms and rewards chosen by the students. The researcher also contacted teachers weekly to ensure that rewards and contract forms were available as well as to discuss any problems that arose. Since the researcher worked as an administrator in the Levy County school system, it was easier to monitor the research study and be accessible for teacher contacts.

Instrumentation

The following instruments were used to measure the dependent variables of this study: (a) classroom behavior, (b) self-esteem, and (c) academic achievement during the pretesting and posttesting of both the experimental and control groups.

Child Behavior Checklist

The Child Behavior Checklist (CBCL) instrument was used to assess students' classroom behavior problems (Achenbach & Edelbrock, 1986). The Teacher Report Form (TRF) of the CBCL, which was filled out by the teacher, provided standardized descriptions of problem behaviors. The TRF requested relevant information about a student's background, academic performance, adaptive functioning, and behavior problems.

The TRF was normed on 1,100 nonreferred students, grouped by sex at ages 6-11 and 12-16. The normative samples were obtained by having 665 teachers complete TRFs on randomly selected students attending schools in Nebraska, Tennessee, and Pennsylvania.

Behavior problem scales were normed on 450 boys and 400 girls in each group at ages 6-11 and 12-16 for a total of 1,700 referred students. Referred students were obtained through 29 schools and mental health services located in the eastern, southern, and midwestern United States. Students were referred for behavioral and social-emotional problems. After a separate analysis was conducted for each sex at ages 6-11 and 12-16, problem behaviors were grouped as Internalizing and Externalizing.

To score the TRF, teachers responded to problem items by circling "0" if the item was not true of the child, "1" if the item was somewhat or sometimes true, and "2" if the item was very true or often true. There were a total of 118 problems listed to which the teacher had to respond.

Teachers were asked to base their rating on the previous 2 months. This short time period allowed teachers opportunity to repeat ratings within the same year to assess changes within a student's behavior.

The TRF was scored on the teachers' report version of the Child Behavior Profile. Separate versions of the profile have been developed for each sex at ages 6-11 and 12-16 to

reflect sex and age differences. Scores were presented as percentiles and normalized T-scores. Normalized T-scores were based on percentiles of the raw score distribution, rather than a mean of exactly 50 and a standard deviation of 10 for all scales. Hand-scoring forms and computer programs were available for scoring the profile.

Reliability for the TRF addressed three sources of differences: (a) test-retest reliability, (b) stability, and (c) teacher/aide agreement. Using the Pearson Correlation to analyze differences in teachers' ratings over short periods (test-retest reliability), the median for all scales was .90 over a 1-week period and a .84 over a 15-day period. Over a 2-month interval, the medial test-retest correlation was .74 and over a 4-month interval .68 (stability). The median Pearson Correlation was .75 for all scales across all four age and sex groups when the differences between teachers and aides who interacted with pupils in the same class were analyzed (i.e., teacher-aide agreement).

Content validity of the TRF was evaluated in terms of whether the items were related to concerns about students' need for special help for behavioral and social-emotional problems. Most of the TRF problems items were derived from CBCL items developed from previous research, pilot testing in clinics, and feedback from parents, paraprofessionals, and clinicians. Teachers' ratings of TRF items were compared to scores obtained on every item by 1,100 pupils referred for

services for behavioral or social-emotional problems and 1,100 demographically similar nonreferred pupils. The items on the TRF were found to relate to mental health concerns.

There was also some evidence for the construct validity of the TRF. For example, correlations between the TRF and corresponding scales on the Conners Revised Teacher Rating Scale ranged from .62 to .90. In addition, the criterion-related validity was evaluated in terms of significant differences between demographically similar referred and nonreferred pupils on all TRF scales for all sex-age groups. Students referred for services for behavioral or social-emotional problems were used as the criterion to test the discriminative power of the scales. Referral status accounted for a medium-to-large percent of variance in scores. Race, age, and socioeconomic status had no significant effect. Procedures and cutoff points were presented for discriminating scores in the normal versus clinical range (see Appendix F for sample CBCL test).

Piers Harris Children's Self-Concept Scale

The Piers Harris Children's Self-Concept Scale was also used by the researcher to assess students' self-esteem (Piers, 1984). The scale consisted of 80 first-person declarative statements, such as "I can be trusted," and participants responded "yes" or "no." The items were written on a third-grade reading level and included both positive and

negative statements. The scale, however, was intended for use with children in grades 4 through 12.

The Self-Concept Scale was also originally conceived as a unitary measure of evaluative components of children's self-concept but was later developed further to measure six aspects of self-esteem: behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, unhappiness, and satisfaction.

The Piers Harris Children's Self-Concept Scale was standardized on 1,183 children in grades 4 through 12 in a Pennsylvania school district. An alpha coefficient of .90 was reported for both male and female populations. Reliabilities of .88 and .93 were cited for boys and girls using the Kuder-Richardson Formula 20. The internal consistency of the cluster scales was slightly lower, but still respectable, with a range of .73 to .81. The test-retest reliabilities for the total score ranged from .42 to .96, with retest intervals of a few weeks to 1 year.

According to Jeske (1985) and Epstein (1985), the Piers-Harris Children's Self-Concept Scale possessed sufficient reliability and validity and was regarded as a sound instrument for assessing children's self-esteem. They also highly recommended this scale as a classroom screening device, as an aid to clinical assessment, and as a research tool. The suggested administration time was 15 to 20 minutes.

Direct observation techniques, such as frequency counts and percentages of tasks attempted, completed, and completed correctly, as well as students' cumulative grade-point averages, were recorded. In addition, a questionnaire was developed by the researcher and administered to both the experimental and control groups to assess their attributions of academic success and failure (see Appendix G for sample questionnaire).

Data Analysis

Collection of Posttest Data

All students in the experimental and control groups were retested at the end of the 6-week implementation period to determine the treatment effects on the same dependent variables (i.e., self-esteem, academic achievement, and classroom behavior). The same instruments and procedures used during pretesting to administer and score test results were used during posttesting. Pretest and posttest scores from The CBCL, Piers-Harris, and students' cumulative grade-point averages were analyzed using analysis of covariance procedures.

Statistical Procedures

The three-way analysis of covariance was used to test for statistically significant differences between the experimental and control group means. The analysis of

covariance allowed the researcher to adjust statistically posttest scores as a result of any differences that may have existed between the groups on the covariate or pretest. The analysis of covariance also allowed the researcher to determine if the interaction effect between the independent variables and the dependent variables was statistically significant.

Confidence in the analysis of covariance results is strengthened when the assumption of homogeneity of slopes of the regression lines for the two treatment groups and the assumption of linearity are met. The assumption of homogeneous regression slopes is empirically tested. When groups have the same number of subjects, the analysis of covariance is robust to the assumption of homogeneity of variances within cells and does not have to be subjected to empirical testing. The assumption of linearity requires the relationship between the covariate variables and the dependent variables to be linear. This means that an increase of a specified number of points on the covariate is related to about the same increase on the dependent variable (Huck, Cormier, & Bounds, 1974; Keppel, 1982).

The results of testing the assumption of homogeneaity of regression slopes in the analysis of covariance was expressed as an F-ratio for the interaction effect between the treatment and the covariate (pretest). A significant F-ratio was found if the interaction effects were significant at

alpha = .05 or less (Vaillant & Vaillant, 1982). A statistically significant F-ratio for treatment did not necessarily indicate all groups' regression slopes differed significantly from one another. It may indicate a difference between only one group and the remaining groups. When a null hypothesis for treatment was retained, the assumption was made that the treatment did not differ in its effect. If the F-ratio for treatment was statistically significant at alpha = .05 or less, the null hypothesis was rejected, and the assumption was made that the treatment differed in its effects on the dependent variables. When a statistically significant F-ratio was found, further statistical analysis was conducted to determine which differences among the treatment means were significant.

Follow-up analysis or posthoc comparisons for the significant F-ratio were conducted using least square means for the adjusted means on the covariate. The data from the statistical procedures are reported, analyzed, and discussed in Chapter IV.

CHAPTER IV
RESULTS AND LIMITATIONS

The purpose of this study was to investigate the use of contingency contracts as an effective intervention strategy to motivate low-performing Black and White male elementary-level students to perform higher academically. A second purpose was to determine if the use of contingency contracts would have a positive effect on their overall classroom behavior and self-esteem. A third purpose was to determine if these variables would differ for the two racial groups participating in this study.

The data were analyzed to obtain descriptive statistics such as percentages of tasks completed for Blacks and Whites in the contract and control groups. Hypotheses were tested using the analysis of covariance. The significance level was set at .05 for each test.

Descriptive analysis revealed that when contracts were implemented, students began 2 percent and completed 7 percent more classroom assignments than students who received no treatment. No significant differences were observed between the races for students in the treatment and control groups (see Table 1).

Table 1

Percentage of Tasks Begun and Completed for Black and White Males

	Experimental Group (N=36)		Control Group (N=36)	
	Tasks Begun	Tasks Completed	Tasks Begun	Tasks Completed
Total Group	97%	93%	95%	86%
Black Males (N=18)	96%	92%	94%	85%
White Males (N=18)	96%	93%	95%	86%

A contract goal was set for students to achieve 85 percent skill mastery on classroom assignments. Only 31 percent of the males in the treatment group achieved cumulative grade-point averages of 85 percent or better. No students in the control group achieved this goal.

In addition, students' attributions of academic success and failure were recorded. Students in the treatment group cited effort and ability as the primary causes of academic success and lack of ability and lack of effort as the primary causes of failure. Even though students in the treatment group cited a higher percentage rate for attributions of success, 94 percent compared with 72 percent for students in the control group, students in the control group cited a

higher percentage rate for attributions of failure, 92 percent compared with 86 percent for males in the treatment group. Primary attributions of academic success and failure were the same for race groups, as well as students in the treatment and control groups. Visual evidence is presented in Table 2.

Table 2

Attributions of Academic Success and Failure for Black and White Males

	Experimental Group (N=36)			Control Group (N=36)		
Variables	Black Males	White Males	Total Group	Black Males	White Males	Total Group
Success						
Lucky	5%	0%	6%	17%	12%	28%
Ability	17%	3%	19%	10%	8%	19%
Effort	28%	47%	75%	23%	30%	53%
Failure						
Unlucky	8%	6%	14%	8%	0%	8%
Lack of Ability	23%	36%	58%	17%	31%	47%
Lack of Effort	19%	8%	28%	25%	19%	45%

The results of testing also indicated that students in the treatment group had a 7 percent higher rate for

compliance with classroom rules than the students in the control group. No significant differences were found between the two race groups. Visual evidence is presented in Table 3.

Table 3

Percentages for Compliance with Classroom Rules

	Experimental Group (N=36)	Control Group (N=36)
	Compliance with Rules	Compliance with Rules
Total Group	91%	84%
Black Males (N=18)	90%	82%
White Males (N=18)	89%	86%

Results of Testing the Null Hypothesis

Nine null hypotheses were tested. The three-way analysis of covariance (ANCOVA) statistic was applied to each posttest measure using the appropriate pretest measure as the covariate. An analysis of the data was compiled and the results of the testing of the null hypotheses were presented (see Table 4 for ANCOVA summary of results).

Table 4

Summary for the Three-Way Analysis of Covariance

Source	df	MS	F-ratio	P
Academic Achievement				
Achievement	1	4275.38	117.20	.0001
Contracts	1	1921.53	52.90	.0001
Race	1	32.63	0.89	.3478
Schools	2	24.72	0.34	.7139
Contract * Race	1	10.97	0.30	.5854
Contract * School	2	31.40	0.43	.6521
Classroom Behavior				
Behavior	1	28640.36	166.47	.0001
Contracts	1	7123.49	41.40	.0001
Race	1	9.27	0.05	.8172
Schools	2	463.25	1.35	.2676
Contracts * Race	1	659.37	3.83	.0547
Contracts * School	2	1422.62	4.13	.0206
Self-Esteem				
Self-esteem	1	6426.15	82.90	.0001
Contracts	1	5276.99	68.07	.0001
Race	1	59.54	0.77	.3842
School	2	234.69	1.51	.2280
Contracts * Race	1	1.57	0.02	.8871
Contracts * Schools	2	315.47	2.03	.1392
Within Error	63			
Corrected Total	71			

Null Hypothesis One

The three-way analysis of covariance statistical procedure was used to test each of the nine null hypothesis of this study. In each case, the alpha level was set at .05.

H_1: No significant difference will exist between the adjusted mean posttest scores for the measure of academic achievement for low-performing students who receive contracts when compared to low-performing students who do not receive contracts.

The results of the ANCOVA (shown in Table 4) indicated a significant main treatment effect for academic achievement: F-ratio = 52.90 at the .01 level of significance, with 1 and 63 degrees of freedom. The observed posttest group mean score in academic achievement was higher for students who received contracts (mean = 79.38) than it was for students in the control group (mean = 69.02). No significant differences were found between Black and White males or between schools. The least square mean (LSM) was also higher for students in the contract group (LSM = 79.38) when compared to students in the control group (LSM = 69.02).

Null Hypothesis Two

H_2: No significant difference will exist between the pretest and posttest measure of classroom behavior for low-performing students who receive contracts when compared to low-performing students who do not receive contracts.

As shown in Table 4, a significant interaction effect occurred between school and treatment for classroom behavior: F-ratio = 4.13 at the .05 level of significance, with 2 and 63 degrees of freedom. This precluded a straightforward

interpretation of the F-ratio for treatment. When contracts were implemented, schools were found to be a significant factor in the observed differences between group means. Students in the treatment group showed improvement in classroom behavior across all three schools, but group means were significantly different between the three schools. Group means differences between the covariate and posttest scores for schools A, B, and C were 6.08, 20.00, and 15.41 points, respectively. Visual evidence for the results is presented in Table 5.

Table 5

Means and Standard Deviations for Classroom Behavior Within Schools and Contract Groups

		Experimental Group		Control Group	
Classroom Behavior	N	$\bar{X}$	SD	$\bar{X}$	SD
School A	(N=12)				
Pretest		36.00	(31.16)	36.83	(25.33)
Posttest		29.92	(26.05)	39.83	(27.43)
School B	(N=12)				
Pretest		54.25	(24.79)	26.42	(25.39)
Posttest		34.25	(18.77)	32.75	(24.28)
School C	(N=12)				
Pretest		35.58	(23.22)	29.08	(29.44)
Posttest		20.17	(18.81)	46.00	(32.29)

Further analysis using the least square means was conducted to evaluate differences among the three schools. Students in the treatment group within Schools C and B showed the greatest improvement in classroom behavior. (The group mean difference for School C was 31.06 points and for school B was 20.87 points.) Visual evidence of these data is given in Table 6.

Table 6

Least Square Means for Classroom Behavior Within the Three Schools and Contract Groups

Contract	School	Least Square Mean
Yes	A	30.21
No	A	39.45
Yes	B	19.87
No	B	40.74
Yes	C	20.79
No	C	51.85

In addition, the Pearson product-moment correlation coefficients revealed a moderately high positive relationship between classroom behavior and self-esteem for students in the treatment group within School A ($r = .54$, $p. = .0688$). When classroom behavior improved, self-esteem also improved.

However, a strong negative relationship was found between classroom behavior and self-esteem for students in the treatment group within School B ($r = -.69$, $p = .0136$). As student classroom behavior increased and became more disruptive, self-esteem improved. Differences in the way the three schools addressed classroom behavior could have been a contributing factor in the observed differences between the group means.

Null Hypothesis Three

H_3: No significant difference will exist between the adjusted mean posttest scores for the measure of self-esteem for low-performing students who receive contracts when compared to low-performing students who do not receive contracts.

The results indicated a significant main treatment effect for self-esteem: F-ratio = 68.07 at the .01 level of significance, with 1 and 63 degrees of freedom. The null hypothesis was rejected. When contracts were implemented, students in the treatment group showed higher self-esteem (mean score = 63.01) than students in the control group (mean score = 43.63). The least square means also indicated self-esteem was higher for students receiving contracts (LSM = 63.01) when compared to students who did not receive contracts (LSM = 43.63). With treatment, Black males showed slightly more improvement in self-esteem than White males,

but without treatment, the self-esteem of White males was higher, but this observed interaction of race and treatment was not statistically significant. School differences between the two race groups were also not significant.

Null Hypothesis Four

H_4: There will be no school and treatment interaction effect on the measure of academic achievement for low-performing students.

The results of testing indicated no significant difference within the schools for achievement group means: F-ratio = .43 at the .05 level of significance, with 2 and 63 degrees of freedom (Table 4). Data for the achievement group means are presented in Table 7. The null hypothesis was retained.

Null Hypothesis Five

H_5: There will be no school and treatment interaction effect on the measure of classroom behavior for low-performing students.

As previously noted, a significant interaction effect for school and contracts was found for classroom behavior (see $F = 4.13$, $p. < .05$ in Table 4). When contracts were implemented, schools were a significant factor in the observed differences between group means (see H_2). Tables 5

Table 7

Means and Standard Deviations for Academic Achievement Within the Three Schools and Contract Groups

Academic Achievement	N	Experimental Group $\bar{X}$	Experimental Group SD	Control Group $\bar{X}$	Control Group SD
School A	(N=12)				
Pretest		70.13	(13.26)	74.35	(12.03)
Posttest		78.27	(10.97)	69.94	(16.35)
School B	(N=12)				
Pretest		69.52	(8.89)	69.02	(9.78)
Posttest		76.56	(8.26)	65.25	(9.10)
School C	(N=12)				
Pretest		76.67	(9.58)	75.21	(7.75)
Posttest		82.42	(3.53)	72.75	(7.26)

and 6 presented earlier offer visual evidence for the pretest and posttest behavior scores and the adjusted means from the covariate analysis for treatment groups within the schools. The null hypothesis was rejected.

Null Hypothesis Six

H_6: There will be no school and treatment interaction effect on the measure of self-esteem for low-performing students.

No significant difference was found within the schools for the self-esteem group means: F-ratio = 1.51 at the .05 level of significance, with 2 and 63 degrees of freedom (Table 4). Visual evidence for the group means for self-esteem within schools is presented in Table 8. The null hypothesis was retained.

Table 8

Means and Standard Deviations for Self-Esteem Within the Three Schools and Contract Groups

Self-Esteem	N	Experimental Group $\bar{X}$	Experimental Group SD	Control Group $\bar{X}$	Control Group SD
School A	(N=12)				
Pretest		44.25	(15.70)	58.20	(7.27)
Posttest		59.83	(13.91)	50.42	(6.97)
School B	(N=12)				
Pretest		44.50	(13.28)	59.67	(12.29)
Posttest		58.42	(14.50)	45.42	(15.14)
School C	(N=12)				
Pretest		48.03	(17.81)	59.33	(13.94)
Posttest		55.75	(16.70)	50.08	(11.41)

Null Hypothesis Seven

H_7: There will be no race and treatment interaction effect on the measure of academic achievement for low-performing students.

No significant effect was found in Table 4 between race and contracts for achievement group means: F-ratio =.89 at the .05 level of significance, with 1 and 63 degrees of freedom. Race did not contribute to the observed differences between group means (see Table 9). The null hypothesis was retained.

Table 9

Mean and Standard Deviation Scores for Academic Achievement

	Experimental Group (N=36)		Control Group (N=36)	
	$\bar{X}$	SD	$\bar{X}$	SD
Black Males (N=18)				
Pretest	70.57	(12.20)	70.92	(11.90)
Posttest	79.74	(6.81)	68.08	(12.22)
White Males (N=18)				
Pretest	72.64	(10.02)	74.81	(7.87)
Posttest	78.43	(7.78)	70.54	(11.33)

Null Hypothesis Eight

H_8: There will be no race and treatment interaction effect on the measure of classroom behavior for low-performing students.

No significant effect was found in Table 4 between race and contracts for classroom behavior group means: F-ratio = .05 at the .05 level of significance, with 1 and 63 degrees of freedom. Race did not contribute to the observed differences between group means. Visual evidence for group means is presented in Table 10. The null hypothesis was retained.

Table 10

Means and Standard Deviation Scores for Race and Contract Group on Classroom Behavior

	Experimental Group		Control Group	
	$\bar{X}$	SD	$\bar{X}$	SD
Black Males (N=18)				
Pretest	36.33	(26.06)	24.17	(21.75)
Posttest	20.94	(18.37)	37.61	(26.94)
White Males (N=18)				
Pretest	47.56	(28.10)	37.39	(29.48)
Posttest	35.28	(22.88)	41.44	(29.52)

Pearson correlation coefficients, although not significant, showed a moderately high positive relationship between behavior and achievement for White males in the treatment group ($r = .45$, $p. = .0588$). When behavior improved, achievement also improved.

Null Hypothesis Nine

H_9: There will be no race and treatment interaction effect on the measure of self-esteem for low-performing students.

No significant effect was found between race and contracts for self-esteem group means: F-ratio = .77 at the .05 level of significance, with 1 and 63 degrees of freedom (see Table 4). Race did not contribute to the observed differences between group means (see Table 11). The null hypothesis was retained.

Limitations of the Study

One limitation of this study may have been the focus on macro instead of micro behaviors in the participating classrooms. Very little attention was directed toward teacher variables and other factors within the specific classrooms that might have influenced student behaviors in this study. Some teachers create a highly stimulating teaching environment that facilitates learning while others do not. Also, some teachers are more rigid and punitive in

Table 11

Means and Standard Deviation Scores for Self-Esteem for Race and Contract Groups

	Experimental Group (N=36)		Control Group (N=36)	
	$\bar{X}$	SD	$\bar{X}$	SD
Black Males (N=18)				
Pretest	49.28	(10.94)	61.94	(8.76)
Posttest	61.50	(12.05)	51.78	(11.04)
White Males (N=18)				
Pretest	41.94	(18.37)	56.39	(12.85)
Posttest	54.50	(16.83)	45.50	(11.50)

their approach to students, as well as more negative in their attitudes and expectations toward students with learning and behavior problems. On the other hand, other teachers are more flexible and demonstrate a more caring and nurturing attitude toward students, as well as maintain high expectations for student success. These factors affect student learning but were not considered within the design of this study.

Another limitation of the study was to allow teachers to establish their own classroom behavior rules and grading criteria without establishing some criteria for consistency across all three schools and for all 21 teachers during

implementation of treatment. Behavior rules and grading criteria among the 21 teachers obviously differed.

In addition, the generalizability of the results is questionable. The results of this study are limited to Black and White low-performing and failing males in the fourth and fifth grades. The results may be generalizable to other public schools within rural counties with similar demographics to those participating in this study.

CHAPTER V
SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to investigate the use of contingency contracts as an effective intervention to motivate low-performing Black and White males in regular elementary classrooms to greater academic achievement. In addition, a second purpose was to determine if the use of contingency contracts would improve the classroom behavior and self-esteem of low-performing males. It was also the purpose of this study to determine whether these variables differed for the two race groups.

Chapter V contains a brief summary of the study, discussion of the results, conclusions drawn from the results, and recommendations for further research and the implementation of this strategy.

Summary

The issue of low-performing and failing students has been identified as a national concern with academic failure occurring at a higher rate for males than for females (Gustafson, 1989; Knujufu, 1990; Ogbu, 1990; Tyler, 1989). The effects of school failure on students are often

manifested in a lack of motivation to perform academic work, increased classroom behavior problems and lowered self-esteem (Canfield, 1990; Glasser, 1986; Kauffman, 1989). If such academic failure continues, the effects worsen and dropping out of school is often viewed by students as a viable alternative (DeRidder, 1990).

It seems obvious that there is a need for effective intervention strategies to be implemented in the early elementary grades to address and attempt the prevention of the effects of academic failure. The theoretical foundations of operant research provide a strong rationale for the use of contingency contracts as a positive intervention strategy to prevent academic failure. Contingency contracts have been found to be effective and are widely used by special educators. However, prior to this current research, such contracts had not been empirically validated with Black and White low-performing males in a regular elementary classroom setting.

An experimental randomized pretest-posttest control group design was used for this study. The independent variables were contingency contracts, race, and school. The dependent variables were academic achievement, classroom behavior, and student self-esteem. Seventy-two academically low-performing Black and White males were randomly assigned to experimental and control groups at three elementary schools. Weekly contracts and rewards were administered to

students upon completion of specific goals. Student contracts and rewards were monitored by the classroom teachers agreeing to participate in the study.

The students were pretested on measures for academic achievement (cumulative grade-point averages), classroom behavior (Child Behavior Checklist, Achenbach & Edelbrock, 1986), and self-esteem (Piers Harris Self-Concept Scale, Piers, 1984). Following a 6-week implementation period, participants were posttested on these same variables using the same instruments. A three-way analysis of covariance was conducted to determine whether the main effect and treatment interaction effects were significant.

Significant treatment main effects were found on the outcomes of academic achievement and self-esteem. A significant interaction between treatment and school was found to affect classroom behavior. Examination of the least square treatment group means in each school showed that although contracting reduced misbehavior scores of students in all schools, it was apparently less effective in School A than in the other schools. Furthermore, when the student's level of achievement increased, self-esteem also improved and classroom behavior problems decreased. And, when student's academic achievement failed to increase, self-esteem did not improve significantly and disruptive behavior in the classroom increased.

Moderately high positive correlations were found between academic achievement and classroom behavior for White males in the treatment group. A moderately high positive relationship was also found between self-esteem and classroom behavior at School A for Black and White males in the experimental group. The results indicated that when academic achievement improved for White males in the treatment group, classroom behavior improved, and when self-esteem improved for all students in the treatment group at School A, classroom behavior also improved.

The results also revealed a strong negative relationship between self-esteem and classroom behavior at one of the schools in the treatment group. That is, as self-esteem improved, classroom behavior did not improve. Unclear and inconsistent enforcement of rules could have been contributing factors for the obtained results. Overall results from the analysis of covariance and the hypotheses tested indicated that contingency contracts were an effective intervention strategy.

Discussion of Results

The results of the present study support the theory and the premise that contingency contracts are an effective intervention strategy that can be effectively used to motivate low-performing elementary age males to achieve higher academically regardless of whether they are Black or

White. The results also provide support for the theory and the premise that contingency contracts with rewards have a positive effect on classroom behavior and self-esteem of students with academic failure histories (Murphy, 1988; Skinner, 1971). Both Black and White participants in this study who received contracts with rewards showed statistically significant improvement in their academic achievement, classroom behavior, and self-esteem when compared with participants in the control group who did not receive contracts with rewards.

Academic Achievement

Students in the treatment group began and completed a higher percentage of classroom assignments than did those students in the control group. However, no significant differences were found between Black and White males in the treatment group with respect to beginning and completing class assignments. Students in the treatment group also showed significantly higher cumulative grade-point averages than the students in the control group. Thirty-one percent of the students in the treatment group obtained cumulative grade-point averages of 85 percent or better. No students in the control group achieved this goal. Contributing factors could have been the short period of time (6 weeks) students were required to achieve 85 percent skill mastery. For some students this required improving their cumulative grade-point

average from an "F" to a "B." Because of their academic failure histories, students in this study might have had gaps in their skill areas that required a longer period of time to remediate. Students in the treatment group also showed higher posttest mean scores for academic achievement than did members of the control group. Even though the posttest means for academic achievement were higher for Black students than for Whites following treatment, the increase was not statistically significant. The findings did not support previous research indicating that Black males perform at a lower level than White males when contracts were implemented and students were motivated to achieve. Related theory was supported, however, when treatment was withheld. White students in the control group had slightly higher group means for achievement than did Blacks in the control group. Differences between the two race groups were not statistically significant.

Existing theory was also supported which indicates that students will work harder and learn more quickly if they are rewarded for doing something correctly (Bandura, 1977); and if the rewarding experience is satisfying, students will continue to perform well in school (Skinner, 1971). On the other hand, when students continue to experience academic failure, there is a decrease in the student's motivation to perform academic work (Beck & Muia, 1980; Hubbel, 1980). Thus, students are able to learn despite their academic

failure and progress will occur if the learning environment is positive.

With regards to students' attributions of academic success and failure, those in the treatment group cited effort and ability as the primary causes of academic success, and lack of ability and lack of effort as the primary causes of academic failure. Students in the control group also cited effort and luck as the primary causes of academic success, but lack of ability and lack of effort as primary causes of academic failure. These findings also support theory regarding attributions of success and failure (Rich & Hyatt, 1981; Taliui & Gama, 1986; Weiner, 1980). Very few differences were noted between those students who received treatment and those who did not and between race groups. It may be that the academic failure histories shared by these groups have brought their thinking closer together rather than further apart, despite their other experiences. However, this is problematical and needs further research to verify.

Classroom Behavior

In addition to academic achievement, contingency contracts had a positive effect on classroom behavior. Students in the treatment group showed a significant decrease in classroom behavior problems when compared with those in the control group. In fact, classroom behavior problems for

students in the control group showed an increase in the posttest mean scores. And, the Black males showed more improvement on the posttest measure for classroom behavior than did the White males, but the difference between the two groups was not statistically significant.

Students who received contracts also showed a higher percentage of compliance with classroom rules than the students who did not receive treatment. However, no significant difference was found between Black and White students in the treatment group with regard to compliance with classroom rules. The most noticeable difference between the two race groups was found within the control group. Although not significant, the White students showed a lower percentage for compliance with school rules than did Black students.

A large percentage of students in the treatment group (94 percent) scored in the normal range on the Child Behavior Checklist (Achenbach & Edelbrock, 1986). However, 6 percent in the treatment group scored in the clinical range for behavior problems. In comparison, 81 percent of the control group scored in the normal range and 19 percent scored in the clinical range for behavior problems.

During pretesting, students in the treatment group scored highest in the areas of social withdrawal and inattentive behaviors. During posttesting, students in the treatment group only scored high in the area of

inattentiveness. In comparison, members of the control group during pretesting scored highest in the areas of social withdrawal, self-destructive behaviors, and aggressiveness. During posttesting, students in the control group continued to score high in the areas of social withdrawal, self-destructive behavior, and aggressiveness. The results indicated that very little change occurred in the behavior of students in the control group or in the way teachers perceived these students.

These findings also support existing theory. Kauffman (1989) indicated that a strong relationship exists between low academic performance and classroom behavior problems. When students experience academic failure and are frustrated, classroom behavior problems will increase, but when students experience academic success, there is a decrease in the student's disruptive behavior in the classroom.

Schools had a significant influence on the way students in this study behaved. Students in the treatment group demonstrated improvement in classroom behavior within all three schools, but significant differences were found between school group means. The least square means indicated that the greatest improvement in classroom behavior occurred in Schools C and B. Pearson Product-Moment Correlations also revealed that a moderately high positive relationship existed between classroom behavior and self-esteem for students in the treatment group within School A, and a strong negative

relationship was found between classroom behavior and self-esteem for students in the treatment group within School B. The assumption is made that when classroom behavior improved for students in school A, self-esteem also improved, and when student classroom behavior increased and became more disruptive, self-esteem still improved. Differences in the way the three schools addressed classroom behavior might have been a contributing factor to the observed differences between group means.

Self-Esteem

Contingency contracts also had a positive effect on the self-esteem of students in the treatment group. Students who received contracts with rewards scored higher on the posttest measure of self-esteem when compared to the scores on the covariate than the students in the control group. During pretesting, students in the treatment group expressed low self-esteem in the areas of behavior and intelligence. After contracts with rewards were implemented, students expressed high self-esteem in the area of happiness. Improvement was also made in other areas of self-esteem, with popularity being the lowest overall score (average range) for participants in the treatment group.

The reverse was found for students in the control group. During pretesting, students in the control group expressed low-self-esteem in the areas of behavior and popularity.

During posttesting, these same students expressed low self-esteem in the areas of intelligence and behavior and high self-esteem in the area of physical appearance. Self-esteem for students in the control group also showed a decrease or lower self-esteem in other areas.

When the Blacks (males) were compared with Whites (males), the Blacks scored higher on the posttest mean for self-esteem, but the increase was not statistically significant. During pretesting, the Black students in the treatment group expressed low self-esteem in the areas of behavior and anxiety, but during posttesting only expressed low self-esteem in the area of anxiety. During pretesting, White students in the treatment group expressed low self-esteem in the areas of behavior and intelligence, but during posttesting expressed low self-esteem in the area of popularity. High self-esteem was expressed in the area of happiness for both race groups during posttesting.

The research findings supported the existing theory and the premise that academic failure has a negative effect on students' self-esteem and that changes in one can lead to changes in the other (Byrne, 1984; Hahn, 1987; Rose et al., 1983). When academic achievement increases and classroom behavior problems decrease, students feel better about themselves, and their self-esteem improves. However, when academic achievement decreases or students experience failure, behavior problems tend to increase. When students

are not as motivated to perform academic tasks, self-esteem is lowered.

Conclusions

The research findings from this study supported the hypothesis that the contingency contract treatment had a positive effect on participating students' academic achievement, classroom behavior, and self-esteem. Students who received the treatment scored significantly higher on the adjusted means for these variables than the students in the control group. The findings from this study provided no support, however, for differences between low-performing Black and White males with regard to academic achievement, classroom behavior, and self-esteem. Although some differences were noted, they were not statistically significant.

The research findings of this study also supported the premise that contingency contracts can be used as an effective intervention strategy to motivate low-performing and failing elementary male students to achieve higher academic achievement. Students in the treatment group began and completed more classroom assignments than did the students in the control group and demonstrated overall a higher cumulative grade-point average mean than the students who received no treatment.

In addition, a contributing factor to the students' improvement in academic achievement, self-esteem, and classroom behavior might have been the students' ownership and vested interest in the contract-reward system. Students were allowed to choose their own rewards for tasks that they were ordinarily expected to perform without tangible rewards. The contracts were a visible way to help the students keep track of their progress. The rewards also served as a motivator that assisted students in attaining set goals. Because students were rewarded and could choose their rewards, they may have had a stronger interest in accomplishing the goals that were established.

Recommendations for Further Study

The research findings from this study support the premise that contingency contracts are an effective intervention strategy that can be used to improve students' academic achievement, classroom behavior, and self-esteem. The following recommendations are being made as possible ways to improve research and the implementation of this strategy.

First, further research should establish control and consistency over teacher variables affecting outcome. For example, it would be less confounding if uniform grading criteria were established across schools and for teachers participating in the study during the treatment implementation phase.

Second, it would be best to assess teacher attitudes before and following treatment implementation in such a study to determine the degree of teacher attitude change occurring toward the low-performing and failing student. Some teachers maintain negative attitudes and low expectations toward students even when the student shows improvement in both behavior and grades. Teachers who maintain negative attitudes and low expectations of students, even after progress has been made, may require some additional inservice training and self-analysis to assist them in developing more positive behaviors toward students. More research is needed to verify this phenomenon.

Third, any such research should ensure inservice follow-up and role-playing for teachers to assist them with the transference of skills and ideas. Telling a teacher the positive attributes of a strategy may be ineffective in getting that teacher to use the strategy without further inservice and role-playing situations in which the strategy might be used. For example, one teacher participating in this study stated that a student in the treatment group did fine as long as rewards were given, but when treatment was terminated, the student reverted to former unacceptable behaviors. The teacher did not take ownership of the strategy and continue to implement it to maintain acceptable student behavior.

Fourth, in further research concerning contingency contracts, contracts and rewards should be arranged so students in the control group do not witness students in the treatment group receiving rewards for the same required tasks. Otherwise, students in the control group may become more discouraged and withdraw from the learning process.

Fifth, researchers should add a study skills or peer-tutoring component to contingency contracts so as to facilitate higher academic grades. Because of the academic failure histories low-performing students have experienced, some students might have gaps within their skill areas that will require more remediation and reinforcement of skills.

Finally, further research should address low-performing students' instructional level. Curriculum goals need to be tailored to the student's functioning level, regardless of intelligence. Even though students might have average intelligence, they may not be functioning academically on grade level. With splinter skills, it may take low-performing and failing students considerably longer to reach 85 percent skill mastery without some corrective steps. Further research is needed in this area.

APPENDIX A
PERMISSION REQUESTS

School Board of Levy County, Florida

P. O. Drawer 129 • Bronson, Florida 32621-0129
Phones 486-2151 and 486-2152

WILL IRBY
SUPERINTENDENT

WAYNE E. BEAUCHAMP
DISTRICT 1 - BRONSON

TED ALEXANDER
DISTRICT 2 - CEDAR KEY

G. FRANK ETHERIDGE
DISTRICT 3 - WILLISTON

RICKY LOWE
DISTRICT 4 - CHIEFLAND

BURKE BROOKS
DISTRICT 5 - YANKEETOWN

December 3, 1990

Mrs. Leila Pratt
Bronson Elementary School
P. O. Box 220
Bronson, FL 32621

Dear Leila:

As per your request, please consider this letter as permission to conduct an educational experimental study at Bronson, Chiefland, and Joyce Bullock Elementary Schools as described in your letter dated November 20, 1990.

I have talked to each of the principals who will be involved, and they are prepared to give you full support. Having worked with you when you were a school psychologist and more recently as a school administrator, I have full confidence in your judgment, discretion, and confidentiality as it relates to this project. I further wish you much success and stand ready to offer support in any way. When you finish your study, I would be very much interested in the results.

Sincerely,

Paul D. Johnson
Assistant Superintendent
Administration

PDJ/rmt

xc: Will Irby, Superintendent

November 20, 1990
6425 NW 29th Street
Gainesville, Florida 32606

Paul Johnson
Assistant Superintendent
School Board of Levy County
P.O. Drawer 129
Bronson, Florida 32621

Dear Mr. Johnson:

I am writing to request permission to conduct an experimental study in the Levy County School System.

I am currently enrolled at the University of Florida as a doctoral student in the school Psychology track. I am interested in conducting the research for my doctoral dissertation in the Levy County Schools. I want to target low-performing fourth- and fifth-grade males at Bronson, Chiefland, and Joyce Bullock Elementary Schools who have experienced repeated academic failure, but are not receiving exceptional student education services.

The research design is experimental. Subjects in the experimental group will receive an intervention strategy in efforts to improve their academic achievement, classroom behavior, and self-esteem. Subjects in the control group will continue to receive the regular classroom instruction during the implementation phase. The treatment will be a classroom intervention strategy designed to motivate students to learn. Students will not be required to ingest or take anything that will be harmful to them. Since this is an experimental study, I will also need the assistance of the guidance counselor and classroom teacher in each of the three schools. Implementation is tentatively scheduled to begin in January 1991 and last for a 6-week grading period. Permission will also be obtained from parents to use their child in the study. I truly hope the study will benefit Levy County students specifically, and the schools in general.

I look forward to hearing from you at your earliest convenience regarding the affirmation to conduct this study. Meanwhile, thank you very much for your time, assistance, and consideration of this request.

Sincerely,

Leila Pratt

UNIVERSITY OF FLORIDA INSTITUTIONAL REVIEW BOARD

THIS FORM MUST BE TYPEWRITTEN. Please read the reverse side before completing this form.

OFFICE USE ONLY
Please do not write in this space

1. TITLE OF PROJECT: The Effects of Contingency Contracting on Race, Academic Achievement, Classroom Behavior and Self-Esteem of Low-Performing Males Elementary Students.

2. PRINCIPAL INVESTIGATOR(s): (Name, degree, title, dept., campus address & phone #) Leila W. Pratt, Ed.S., Assistant Principal

3. SUPERVISOR (IF PI IS STUDENT): (Name, campus address & phone #) Joe Wittmer, Counselor Education Department, Norman Hall, 392-0731

4. DATES OF PROPOSED PROJECT: From January To April 1991

5. SOURCE OF FUNDING FOR THE PROJECT: Personal Funds
(As indicated to the Division of Sponsored Research)

6. SCIENTIFIC PURPOSE OF THE INVESTIGATION: Is to determine if contingency contracts will have a positive effect on the academic achievement, classroom behavior, and self-esteem of low-performing elementary male students and to see if these variables differ for race.

7. DESCRIBE THE RESEARCH METHODOLOGY IN NON-TECHNICAL LANGUAGE: The UFIRB needs to know what will be done with or to the research participant(s). A randomized Pre-Test/Post-Test control group research design will be used. A total of 24 low performing males, 12 black and 12 white, will be assigned to four groups (6 black males each to an experimental and a control group; and 6 white males each to an experimental and a control group) at the three different elementary schools in Levy County. Males in the experimental groups will receive contingency contracts. Contingency contracts provide rewards to targeted students for accomplishing specific goals. Males in the experimental group will be required to achieve four goals (i.e. Begin assigned class work; complete assigned class work; complete work with 80 percent accuracy; and comply with classroom rules) in order to receive the agreed upon rewards. Males in the control group will continue to receive routine classroom instruction.

8. POTENTIAL BENEFITS AND ANTICIPATED RISK: (If subject is at risk of physical, psychological or economic harm, describe the steps taken to protect subject.) Contingency contracts are designed to re-motivate low-performing male students to want to learn academic work; and hopefully will change students' attitude toward school and learning. Since contingency contracts only provide positive rewards and no punishment, the risks to students are no greater than those ordinarily encountered during routine classroom instruction.

9. DESCRIBE HOW SUBJECTS WILL BE RECRUITED, THE NUMBER AND AGE OF THE SUBJECTS, AND PROPOSED MONETARY COMPENSATION (if any): Students will be selected on the basis of their cumulative grade point average (a 2.7 or less) in reading, math, science, social studies or language for a 6-week grading period during the 1990-92 school term. Approximately 72 males (36 black and 36 white) from the 4th and 5th grade will be included in the study.

10. DESCRIBE THE INFORMED CONSENT PROCESS. INCLUDE A COPY OF THE INFORMED CONSENT DOCUMENT (if applicable). Letters will be sent to the parents of the 72 students selected to participate in the study. If a parent refuses to sign the consent form, the student will be deleted from the selection list.

Please use attachments ONLY when space on the form is insufficient.

Principal Investigator's Signature

Supervisor's Signature

PARENTAL INFORMAL CONSENT FORM

Dear Parent:

My name is Leila Pratt. I am currently enrolled at the University of Florida as a doctoral student in the College of Education, School of Psychology track. I am also employed as an assistant principal with the Levy County School System.

I am writing to request permission to include your son in an educational research study being conducted at his school. The research study will target low-achieving fourth- and fifth-grade male students. Students participating in the study will be randomly assigned to two groups: an experimental and a control group. Students in the experimental group will receive a classroom intervention strategy to improve the student's academic grades, classroom behavior and self-esteem. Students assigned to the control group will continue to receive regular classroom instruction during the implementation period.

All students will be administered a self-concept scale and a behavior checklist will be completed by the teacher. Administration time for the students should take approximately 15 to 20 minutes. Prior arrangements will be made so students can be tested in the morning of a school day as well as be allowed to make up any missed academic work. I will also need access to your child's school records, test scores, and grades. However, a coding system will be used to protect your child's name and test scores.

The risks to the students are minimal and will be no greater than those ordinarily incurred during routine classroom instruction. Students will not have to ingest or do anything that will be harmful to them. Rather, the intervention is a positive strategy that is designed to motivate and reward students for accomplishing specific academic and behavioral goals. Implementation of the research study is tentatively scheduled to begin in January 1991 and last for a 6-week grading period. Refusal to grant permission for your child to participate in the study will not result in any kind of penalty to your child nor will your refusal affect your child's grades.

If you have any questions or concerns about the research study, please contact me at Bronson Elementary School from 8:00 A.M. to 4:00 P.M., Mondays through Fridays, at 486-4550.

Please sign the permission slip below and return it to the guidance counselor at your child's school.

I look forward to hearing from you and working with your child.

Sincerely,

Leila Pratt

I have read and understand the procedure described above. I agree to allow my child, _____, to participate in the study.

_____ _____ _____ _____

Parent/Guardian Signature Date Witness Signature Date

CHILD ASSENT SCRIPT

Dear _____

You have been selected to participate in a research study that will start in January 1991 and last for a 6-week grading period.

The purpose of the study is to see what effects contingency contracts will have on students' academic achievement, behavior, and self-esteem. Therefore, you will be tested before and after the contracts have been implemented.

Contingency contracts are agreements between the teacher and students whereby students are given individual, weekly rewards if they are able to achieve the identified school goals.

Participation is strictly voluntary and you will not be punished in any way if you refuse to participate in the research.

Please sign the permission slip below and return it to the Guidance Counselor at your school.

Thank you in advance for your assistance.

I have read the above information and agree to participate in the research.

Signature: _____

I have read the above information and do not agree to participate in the research.

Signature: _____

APPENDIX B
RESEARCH DESIGN

Randomized Pretest - Posttest Control Group Design

Schools			Groups	Pretest	Treatment	Posttest
A	E_1	(R)	Group A, Experimental - Black Males	O,T_1,T_2,T_3	X	O,T_1,T_2,T_3
	E_2	(R)	Group B, Experimental - White Males	O,T_1,T_2,T_3	X	O,T_1,T_2,T_3
	C_1	(R)	Group C, Control - Black Males	O,T_1,T_2,T_3		O,T_1,T_2,T_3
	C_2	(R)	Group D, Control - White Males	O,T_1,T_2,T_3		O,T_1,T_2,T_3
B	E_3	(R)	Group E, Experimental - Black Males	O,T_1,T_2,T_3	X	O,T_1,T_2,T_3
	E_4	(R)	Group F, Experimental - White Males	O,T_1,T_2,T_3	X	O,T_1,T_2,T_3
	C_3	(R)	Group G, Control - Black Males	O,T_1,T_2,T_3		O,T_1,T_2,T_3
	C_4	(R)	Group H, Control - White Males	O,T_1,T_2,T_3		O,T_1,T_2,T_3
C	E_5	(R)	Group I, Experimental - Black Males	O,T_1,T_2,T_3	X	O,T_1,T_2,T_3
	E_6	(R)	Group J, Experimental - White Males	O,T_1,T_2,T_3	X	O,T_1,T_2,T_3
	C_5	(R)	Group K, Control - Black Males	O,T_1,T_2,T_3		O,T_1,T_2,T_3
	C_6	(R)	Group L, Control - White Males	O,T_1,T_2,T_3		O,T_1,T_2,T_3

R - Random Selection
O - Testing
T - Instrument Used
X - Contingency Contract Treatment
E - Experimental Group
C - Control Group

T_1 - Piers Harris Self-Concept Scale

T_2 - Achenbach Behavior Rating Form

T_3 - Cumulative Grade Point Averages

APPENDIX C
TEACHER SCRIPT

When students are able to achieve four goals, the teacher will use script one.

Script One:

> The teacher will address the student by name and say, "_____, good job. I am very proud of your work. You were able to achieve all four goals this week. For your hard work, you have earned the reward and bonus you selected (give rewards to student). Keep up the hard work." Give student a new contract and say, "Your goals will remain the same for this coming week (state goals). You may keep the same rewards or select a new reward and bonus you would like to earn. Remember, to keep up the good work and tape your contract to your desk."

When students are able to achieve three goals but do not comply with classroom rules (the fourth goal), the teacher will use script two.

Script Two:

> The teacher will address the student by name and say, "_____, you have accomplished three of your goals this week. I am very proud of your hard work. You have earned the reward you selected, but you did not earn the bonus reward because you did not achieve all four goals." Give reward to student. Give student a new contract and say, "Your goals will remain the same for this coming week (state goals). You may keep the same rewards or select a new reward and bonus you would like to earn. You are doing real good, but I want you to try a little harder to accomplish all four goals. Don't forget to tape your contract to your desk."

When students are able to achieve only one or two goals, the teacher will use script three.

Script Three:

> The teacher will address the student by name and say, "_____, you were able to accomplish ___ goal(s) this week. I am proud of you for accomplishing (state goal accomplished), but you need to work harder so you can accomplish all four goals. Because you did not accomplish at least the three academic goals, you did not earn the rewards you selected. You still have an opportunity to work on these goals this coming week." Give student a new contract and say, "Your goals will remain the same for this coming week (state goals). You may keep the same rewards or select a new reward and bonus you would like to earn. Remember to work hard this coming week so you can earn your rewards. Don't gorget to tape your contract to your desk."

When students are unable to achieve any of the goals, the teacher will use script four.

Script Four:

> The teacher will address the student by name and say, "_____, you did not achieve any of the agreed upon goals this week. Therefore, you have not earned the rewards you selected. You need to accomplish at least the three academic goals before you can earn a reward (state goals), and all four goals before you can earn the reward and bonus (state fourth goal)." Give the student a new contract and say, "Your goals will remain the same for this coming week. You may keep the same rewards or select a new reward and bonus you would like to earn. Remember to work hard and do your best. Don't forget to tape your contract to your desk."

APPENDIX D
CONTINGENCY CONTRACT

CONTINGENCY CONTRACT

Date: _____

Name: _____ Teacher: _____

DAY/DATE	SUBJECTS	BEGINS TASK	COMPLETES TASK	PERCENT CORRECT	FOLLOWS RULES
FRIDAY	Reading				
	Math				
	Science				
	Social Studies				
	Language				
MONDAY	Reading				
	Math				
	Science				
	Social Studies				
	Language				
TUESDAY	Reading				
	Math				
	Science				
	Social Studies				
	Language				
WEDNESDAY	Reading				
	Math				
	Science				
	Social Studies				
	Language				
THURSDAY	Reading				
	Math				
	Science				
	Social Studies				
	Language				

GOALS:

(1) Accomplish all four goals daily for one week - receives reward and bonus
(2) Accomplish three academic goals daily for one week - receives reward; no bonus
(3) Accomplish less than three academic goals - no reward or bonus

Legend: (✓) - accomplish goals
(X) - does not accomplish goal
Blank - no tasks assigned

Reward: _____ Bonus: _____

APPENDIX E
REINFORCEMENT LIST

Working with a friend

Taking attendance

Taking attendance card to the office

Free homework pass

Sitting at the teacher's desk to do assigned task(s)

Extra free time

Special party (popcorn)

Use of the computer

Reading a book or magazine

Teach a skill to classmates

Helping the class line up at the door

Listening to a special tape

Decorating the bulletin board

Leading the class to other activities (i.e., lunch, library)

Sodas

Ice cream

Bubble gum

Pencils

Gold dollars

Chips

Fruit juice

Drawing paper

Markers

Candy bars

Little toy cars

Money

APPENDIX F
CHILD BEHAVIOR CHECKLIST

TEACHER'S REPORT FORM

For office use only
ID #

Your answers will be used to compare the pupil with other pupils whose teachers have completed similar forms. The information from this form will also be used for comparison with other information about this pupil. Please answer as well as you can, even if you lack full information. Scores on individual items will be combined to identify general patterns of behavior. Feel free to write additional comments beside each item and in the space provided on page 2.

PUPIL'S NAME		
PUPIL'S SEX ☐ Boy ☐ Girl	PUPIL'S AGE	ETHNIC GROUP OR RACE
TODAY'S DATE Mo.____ Date____ Yr.____	PUPIL'S BIRTHDATE (if known) Mo.____ Date____ Yr.____	
GRADE IN SCHOOL	NAME OF SCHOOL	

PARENTS' USUAL TYPE OF WORK, even if not working now. *(Please be as specific as you can—for example, auto mechanic, high school teacher, homemaker, laborer, lathe operator, shoe salesman, army sergeant.)*

FATHER'S TYPE OF WORK: _____

MOTHER'S TYPE OF WORK: _____

THIS FORM FILLED OUT BY:

☐ Teacher (name) _____

☐ Counselor (name) _____

☐ Other (specify) name: _____

I. How long have you known this pupil?_____ months

II. How well do you know him/her? 1. ☐ Not Well 2. ☐ Moderately Well 3. ☐ Very Well

III. How much time does he/she spend in your class per week?

IV. What kind of class is it? (Please be specific, e.g., regular 5th grade, 7th grade math, etc.)

V. Has he/she ever been referred for special class placement, services, or tutoring?
☐ Don't Know 0. ☐ No 1. ☐ Yes—what kind and when?

VI. Has he/she ever repeated a grade?
☐ Don't Know 0. ☐ No 1. ☐ Yes—grade and reason

VII. Current school performance—list academic subjects and check appropriate column:

Academic subject	1. Far below grade	2. Somewhat below grade	3. At grade level	4. Somewhat above grade	5. Far above grade
1. _____	☐	☐	☐	☐	☐
2. _____	☐	☐	☐	☐	☐
3. _____	☐	☐	☐	☐	☐
4. _____	☐	☐	☐	☐	☐
5. _____	☐	☐	☐	☐	☐
6. _____	☐	☐	☐	☐	☐

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Center for Children, Youth, & Families
University of Vermont
1 South Prospect St.
Burlington, VT 05401

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VIII. Compared to typical pupils of the same age:	1. Much less	2. Somewhat less	3. Slightly less	4. About average	5. Slightly more	6. Somewhat more	7. Much more
1. How hard is he/she working?	☐	☐	☐	☐	☐	☐	☐
2. How appropriately is he/she behaving?	☐	☐	☐	☐	☐	☐	☐
3. How much is he/she learning?	☐	☐	☐	☐	☐	☐	☐
4. How happy is he/she?	☐	☐	☐	☐	☐	☐	☐

IX. Most recent achievement test scores (if available):

Name of test	Subject	Date	Percentile or grade level obtained

X. IQ, readiness, or aptitude tests (if available):

Name of test	Date	IQ or equivalent scores

Does this pupil have any illness, physical disability, or mental handicap? ☐ No ☐ Yes – please describe

What concerns you most about this pupil?

Please describe the best things about this pupil:

Please feel free to write any comments about this pupil's work, behavior, or potential, using extra pages if necessary.

Below is a list of items that describe pupils. For each item that describes the pupil now or within the past 2 months, please circle the 2 if the item is very true or often true of the pupil. Circle the 1 if the item is somewhat or sometimes true of the pupil. If the item is not true of the pupil, circle the 0. Please answer all items as well as you can, even if some do not seem to apply to this pupil.

0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True

0 1 2 1. Acts too young for his/her age
0 1 2 2. Hums or makes other odd noises in class

0 1 2 3. Argues a lot
0 1 2 4. Fails to finish things he/she starts

0 1 2 5. Behaves like opposite sex
0 1 2 6. Defiant, talks back to staff

0 1 2 7. Bragging, boasting
0 1 2 8. Can't concentrate, can't pay attention for long

0 1 2 9. Can't get his/her mind off certain thoughts; obsessions (describe):_____

_____

0 1 2 10. Can't sit still, restless, or hyperactive

0 1 2 11. Clings to adults or too dependent

0 1 2 12. Complains of loneliness

0 1 2 13. Confused or seems to be in a fog
0 1 2 14. Cries a lot

0 1 2 15. Fidgets
0 1 2 16. Cruelty, bullying, or meanness to others

0 1 2 17. Daydreams or gets lost in his/her thoughts
0 1 2 18. Deliberately harms self or attempts suicide

0 1 2 19. Demands a lot of attention
0 1 2 20. Destroys his/her own things

0 1 2 21. Destroys property belonging to others
0 1 2 22. Difficulty following directions

0 1 2 23. Disobedient at school
0 1 2 24. Disturbs other pupils

0 1 2 25. Doesn't get along with other pupils
0 1 2 26. Doesn't seem to feel guilty after misbehaving

0 1 2 27. Easily jealous
0 1 2 28. Eats or drinks things that are not food—don't include sweets (describe):_____

_____

0 1 2 29. Fears certain animals, situations, or places other than school (describe): _____

_____

0 1 2 30. Fears going to school

0 1 2 31. Fears he/she might think or do something bad
0 1 2 32. Feels he/she has to be perfect

0 1 2 33. Feels or complains that no one loves him/her
0 1 2 34. Feels others are out to get him/her

0 1 2 35. Feels worthless or inferior
0 1 2 36. Gets hurt a lot, accident-prone

0 1 2 37. Gets in many fights
0 1 2 38. Gets teased a lot

0 1 2 39. Hangs around with others who get in trouble
0 1 2 40. Hears sounds or voices that aren't there (describe):

_____

0 1 2 41. Impulsive or acts without thinking
0 1 2 42. Likes to be alone

0 1 2 43. Lying or cheating
0 1 2 44. Bites fingernails

0 1 2 45. Nervous, high-strung, or tense
0 1 2 46. Nervous movements or twitching (describe):

_____

0 1 2 47. Overconforms to rules
0 1 2 48. Not liked by other pupils

0 1 2 49. Has difficulty learning
0 1 2 50. Too fearful or anxious

0 1 2 51. Feels dizzy
0 1 2 52. Feels too guilty

0 1 2 53. Talks out of turn
0 1 2 54. Overtired

0 1 2 55. Overweight
56. Physical problems without known medical cause:
0 1 2 a. Aches or pains
0 1 2 b. Headaches
0 1 2 c. Nausea, feels sick
0 1 2 d. Problems with eyes (describe): _____

_____

0 1 2 e. Rashes or other skin problems
0 1 2 f. Stomachaches or cramps
0 1 2 g. Vomiting, throwing up
0 1 2 h. Other (describe): _____

_____

Please see other side

0 = Not True (as far as you know) 1 = Somewhat or Sometimes True 2 = Very True or Often True

0 1 2 57. Physically attacks people
0 1 2 58. Picks nose, skin, or other parts of body (describe): _____

0 1 2 59. Sleeps in class
0 1 2 60. Apathetic or unmotivated

0 1 2 61. Poor school work
0 1 2 62. Poorly coordinated or clumsy

0 1 2 63. Prefers being with older children
0 1 2 64. Prefers being with younger children

0 1 2 65. Refuses to talk
0 1 2 66. Repeats certain acts over and over, compulsions (describe): _____

0 1 2 67. Disrupts class discipline
0 1 2 68. Screams a lot

0 1 2 69. Secretive, keeps things to self
0 1 2 70. Sees things that aren't there (describe): _____

0 1 2 71. Self-conscious or easily embarrassed
0 1 2 72. Messy work

0 1 2 73. Behaves irresponsibly (describe): _____

0 1 2 74. Showing off or clowning

0 1 2 75. Shy or timid
0 1 2 76. Explosive and unpredictable behavior

0 1 2 77. Demands must be met immediately, easily frustrated

0 1 2 78. Inattentive; easily distracted

0 1 2 79. Speech problem (describe): _____

0 1 2 80. Stares blankly

0 1 2 81. Feels hurt when criticized
0 1 2 82. Steals

0 1 2 83. Stores up things he/she doesn't need (describe): _____

0 1 2 84. Strange behavior (describe): _____

0 1 2 85. Strange ideas (describe): _____

0 1 2 86. Stubborn, sullen, or irritable

0 1 2 87. Sudden changes in mood or feelings
0 1 2 88. Sulks a lot

0 1 2 89. Suspicious
0 1 2 90. Swearing or obscene language

0 1 2 91. Talks about killing self
0 1 2 92. Underachieving, not working up to potential

0 1 2 93. Talks too much
0 1 2 94. Teases a lot

0 1 2 95. Temper tantrums or hot temper
0 1 2 96. Seems preoccupied with sex

0 1 2 97. Threatens people
0 1 2 98. Tardy to school or class

0 1 2 99. Too concerned with neatness or cleanliness
0 1 2 100. Fails to carry out assigned tasks

0 1 2 101. Truancy or unexplained absence
0 1 2 102. Underactive, slow moving, or lacks energy

0 1 2 103. Unhappy, sad, or depressed
0 1 2 104. Unusually loud

0 1 2 105. Uses alcohol or drugs for nonmedical purposes (describe): _____

0 1 2 106. Overly anxious to please

0 1 2 107. Dislikes school
0 1 2 108. Is afraid of making mistakes

0 1 2 109. Whining
0 1 2 110. Unclean personal appearance

0 1 2 111. Withdrawn, doesn't get involved with others
0 1 2 112. Worrying

113. Please write in any problems the pupil has that were not listed above:

0 1 2 _____
0 1 2 _____
0 1 2 _____

PLEASE BE SURE YOU HAVE ANSWERED ALL ITEMS

APPENDIX G
ATTRIBUTIONS OF ACADEMIC SUCCESS AND FAILURE
QUESTIONNAIRE

Directions: Please check the correct statement. If more than one statement is correct, number each statement, beginning with the one that is most important and ending with the one that is least important.

(1) I make good or passing grades in school because:

_____ I am smart (ability)

_____ I try hard (effort)

_____ I am lucky

(2) I make poor or failing grades in school because:

_____ I am unlucky

_____ I do not try hard (lack of effort)

_____ I am not smart (lack of ability)

REFERENCES

Achenbach, T. M. (1985). Assessment and taxonomy of child and adolescent psychopathology. Beverly Hills, CA: Sage.

Achenbach, T. M., & Edelbrock, C. (1986). Manual for the Teacher's Report Form and Teacher Version of the Child Behavior Profile. Burlington, VT: University of Vermont, Department of Psychiatry.

Allen, T. E. (1982). Exploring the attributional determinants of continuing motivation. Paper presented at the annual meeting of the American Psychological Association, Washington, DC.

Ames, C., & Ames, R. (1981). Competitive versus individualistic goal structures: The salience of past performance information for causal attributions and effect. Journal of Educational Psychology, 73, 411-418.

Arwood, B., Williams, R. L., & Long, J. D. (1974). The effects of behavior contracts and behavior proclamations on social conduct and academic achievement in a ninth grade English class. Adolescence, 9(35), 425-436.

Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1986). Social foundations of thought and action: A cognitive theory. Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A., & Schunk, D. (1981). Cultivating competence: Self-efficacy and intrinsic interest through proximal self-motivation. Journal of Personality and Social Psychology, 41, 586-598.

Baratz, J. C. (1986). Black participation in the teacher pool. Paper prepared for the Carnegie Forum's Task Force on Teaching as a Profession.

Baratz-Snowden, J. C. (1987, May/June). Issues on Blacks in higher education. Change, p. 19.

Bardon, J. (1987). The translation of research into practice in school psychology. School Psychology Review, 16, 317-328.

Beck, L., & Muia, J. A. (1980). The portrait of a tragedy: Research findings on dropout. The High School Journal, 64, 67.

Becker, W. C., Madsen, C. H., Arnold, C. R., & Thomas, D. R. (1967). The contingent use of teacher attention and praise in reducing classroom behavior problems. Journal of Special Education, 1(3), 287-307.

Bhola, H. S. (1981). Why literacy can't wait: Issues for the 1980s. Convergence, 14, 6-23.

Bond, G. C. (1981). Social economic status and educational achievement: A review article. Anthropology and Education Quarterly, 12(4), 227-257.

Borg, W. R. (1987). Applying educational research (2nd ed.). New York: Longman.

Boyer, E. (1989). Introduction in educating Black children. In D. Strickland &. E. Cooper (Eds.), Educating Black children (p. vii). Washington, DC: Howard University Press.

Bristol, M. M., & Sloane, N. H., Jr. (1974). Effects of contingency contracting on study rate and test performance. Journal of Applied Behavior Analysis, 7(2), 271-285.

Brophy, J. (1982). Classroom management and learning. American Education, 18(2), 20-23.

Brophy, J. (1986). On motivating students. Institute for Research on Teaching. East Lansing, MI: Michigan State University.

Brophy, J. (1987). Synthesis of research on strategies for motivating to learn. Educational Leadership, 40-48.

Brophy, J. E., & Good, T. L. (1986). Teacher behavior and student achievement. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 328-375). New York: Macmillan.

Brown, J., & Weiner, B. (1984). Affective consequences of ability versus effort ascriptions: Controversies, resolutions, and quandaries. Journal of Educational Psychology, 76, 146-158.

Byrne, B. M. (1984). The general academic self-concept nomological network: A review of construct validation research. Review of Educational Research, 54, 427-456.

Canfield, J. (1990, September). Improving student's self-esteem. Educational Leadership, 48(1), pp. 48-50.

Cantrell, R. P., Cantrell, Mary L., Huddleston, C. M., & Wooldridge, R. L. (1969). Contingency contracting with school problems. Journal of Applied Behavior Analysis, 2(3), 215-220.

Center, D., Deitz, S., & Kaufman, M. (1982). Student ability, task difficulty, and inappropriate classroom behavior: A study of children with behavior disorders. Behavior Modification, 6, 355-374.

Clabaugh, G., & Rozycki, E. (1989). Politics, consensus, and educational reform. Education Horizons, 67(1), 6.

Cole, B. P. (1983). The state of education for Black Americans. Education Digest, 49, 28-31.

Coleman, M. C., & Gilliam, J. E. (1983). Disturbing behaviors in the classroom: A survey of teacher attitudes. Journal of Special Education, 17, 121-129.

Collison, M. (1987). More young Black men choosing not to go to college. The Chronicle of Higher Education, 1, 26-27.

Comer, J. (1990, June/July). A plan that works. Teacher Magazine, pp. 46-54.

Covington, M. V. (1984). The self-worth theory of achievement motivation: Findings and implications. The Elementary School Journal, 85(1), 5-20.

Covington, M. V., & Omelich, C. L. (1981). As failure mounts: Affective and cognitive consequences of ability demotion in the classroom. Journal of Educational Psychology, 73, 796-808.

Covington, M. V., & Omelich, C. L. (1982). The role of effort expenditure, ability inferences, and achievement outcome in determining self-worth. Unpublished manuscript, University of California, Berkeley.

Curtis, M., & Meyers, J. (1983). Dropout prediction. Austin, TX: Office of Research and Evaluation.

Curtis, M., & Meyers, J. (1985). School-based consultation: Guidelines for effective practice. In J. Grimes & A. Thomas (Eds.), Best practices in school psychology (pp. 79-94). Washington, DC: National Association of School Psychologists.

Curwin, R., & Mendler, A. (1980). The discipline book. Reston, VA: Prentice-Hall.

DeRidder, L. M. (1990). The impact of school suspensions and expulsions on dropping out. Educational Horizons, 68(3), 153-157.

Diaddigo, M., & Dickie, R. (1978). The use of contingency contracting in eliminating inappropriate classroom behaviors. Education and Treatment in Children, 17-23.

Diener, C. I., & Dweck, C. S. (1980). An analysis of learned helplessness II: The processing of success. Journal of Personality and Social Psychology, 39, 940-952.

Doyle, W. (1986). Classroom organization and management. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed., pp. 392-431). New York: Macmillan.

Dweck, C. S. (1983). Theories of intelligence and achievement motivation. In S. Paris, G. Olson, & H. Stevenson (Eds.), Learning and motivation in the classroom. Hillsdale, NJ: Erlbaum.

Dweck, C., & Elliott, E. (1983). Achievement motivation. In P. Mussen (Ed.), Handbook of child psychology. New York: Wiley.

Emmer, E. T., Evertson, C. M., & Anderson, L. M. (1980). Effective classroom management at the beginning of the school year. Elementary School Journal, 219-231.

Epstein, H. (1985). Piers-Harris Children's Self-Concept Scale. In J. V. Mitchell, Jr. (Ed.), Ninth mental measurements yearbook (Vol. I, pp. 1168-1169). Lincoln: University of Nebraska, Buros Institute of Mental Measurement.

Epstein, J. L. (1981). The quality of school life. Lexington, MA: D. C. Heath.

Evans, T. D., Corsini, R. J., & Gazda, G. M. (1990). Individual education and the 4Rs. Educational Leadership, 48(1), 52-56.

Evertson,C. M., & Emmer, E. T. (1982). Effective management at the beginning of the school year in junior high classes. Journal of Educational Psychology, 74, 485-498.

Feather, N. (1982). Expectations and actions. Hillsdale, NJ: Erlbaum.

Florida School Laws Chapters 228-246 Florida Statutes (1990). Division of Statutory Revision and Office of the Deputy Commissioner of the Department of Education.

Foley, D. (1990, May). Danger: School Zone. Teacher Magazine, pp. 57-63.

Gama, E. M., & de Jesus, D. M. (1986). Teachers' expectations and causal attributions for students' academic achievement. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

Gettinger, M. (1988). Methods of proactive classroom management. School Psychology Review, 17(2), 227-242.

Gickling, E., & Thompson, V. (1985). A personal view of curriculum-based assessment. Exceptional Children, 52, 205-218.

Gjesme, T. (1983). Motivation to approach (TS) and motivation to avoid failure (TF) at school. Scandinavian Journal of Educational Research, 27(4), 145-164.

Glasser, W. (1986). Control theory in the classroom. New York: Harper and Row.

Graham, P. (1987). Black teachers: A drastically scarce resource. Phi Delta Kappan, 68(8), 598-605.

Gundel, R. C. (1981). The interaction of locus of control with three behavioral procedures in the modification of disruptive behavior in emotionally disturbed boys. Multivariate Experimental Clinical Research, 99-108.

Gurney, P. W. (1987). The use of operant techniques to raise self-esteem in maladjusted children. British Journal of Educational Psychology, 57, 87-94.

Gursky, D. (1990, June/July). The greatest challenge. Teacher Magazine, pp. 46-54.

Gustafson, T. (1989). Save our children. Southern Legislator's Conference on Children and Youth. Tampa, FL: Florida House of Representatives, Speaker Staff and Appropriations Staff.

Hadley, H. (1988). Improving reading scores through a self-esteem intervention program. Elementary School Guidance and Counseling, 22(3), 248-252.

Hahn, A. (1987). Reaching out to America's dropouts: What to do? Phi Delta Kappan, 69, 256-263.

Harari, O., & Covington, M. V. (1981). Reactions to achievement behavior from a teacher and student perspective: A developmental analysis. American Educational Research Journal, 18, 15-28.

Hersh, R., & Walker, H. M. (1983). Great expectations: Making school effective for all children. Policy Studies Review, 2, 147-188.

Hess, R. D., & Holloway, S. D. (1984). Family and school as educational institutions. In R. D. Parke (Ed.), Review of child development research (Vol. 7, pp. 179-222). Chicago: University of Chicago Press.

Hewett, F., & Forness, S. (1984). Education of exceptional learners. Boston: Allyn and Bacon.

Hill, D. (1989, September/October). Fixing the system from the top down. Teacher Magazine, pp. 50-55.

Hodgkinson, H. (June, 1985). All one system: Demographics of education, kindergarten through graduate school. Washington, DC: Institute for Educational Leadership.

Holland, S. (1989, September/October). Fighting the epidemic of failure: A radical strategy for educating inner city boys. Teacher Magazine, pp. 88-89.

Hubbell, B. A. (1980). Grade retention policies at the elementary level. Dissertation Abstracts International, 41, 2932A.

Huck, S. W., Cormier, W. H., & Bounds, W. G., Jr. (1974). Reading statustics and research. New York, NY: Harper & Row, Publishers, Inc.

Idol-Maestas, L. (1983). The special educators consultation handbook. Rockville, MD: Aspen.

Isaac, C. S., & Michael, W. (1982). Handbook in research and evaluation. San Diego, CA: EDITS Publishers.

Jackson, A. P. (1983). The effects of selected values clarification activities on the self-concept and reading achievement of Black rural fourth and fifth grade students. Dissertation Abstracts International, 43, 2269A.

Jeske, P. J. (1985). Piers-Harris Children's Self-Concept Scale. In J. V. Mitchell, Jr. (Ed.), Ninth mental measurements yearbook (Vol. I, pp. 1168-1169). Lincoln: University of Nebraska, Buros Institute of Mental Measurement.

Johnson, D. W., & Blankenship, C. S. (1984). A comparison of label-induced expectancy bias in two preserve teacher education programs. Behavior Disorders, 9, 167-174.

Kauffman, J. M. (1989). Characteristics of behavior disorders of children and youth (4th ed.). Columbus, OH: Merrill.

Kazdin, A. E. (1973). Role of instructions and reinforcement in behavior changes in token reinforcement programs. Journal of Educational Psychology, 64(1), 63-71.

Kazdin, A. E. (1980). Behavior modification in applied settings. Homewood, IL: Dorsey Press.

Keller, G. (1989). Review essay: Black students in higher education. Why so few? Planning for Higher Education, 17(3), 43-57.

Kelley, M. L., & Stokes, T. F. (1982). Contingency contracting with disadvantaged youths: Improving classroom performance. Journal of Applied Behavior Analysis, 15, 447-454.

Keppel, G. (1982). Design and analysis: A researcher's handbook. Englewood Cliffs, NJ: Prentice-Hall.

Kirby, F. D., & Shields, F. (1972). Modification of arithmetic response rate and attending behavior in a seventh-grade student. Journal of Applied Behavior Analysis, 5(1), 79-84.

Kline, R. D., & Mechelli, T. (1983). The modification of on-task and task-completion behaviors in elementary school child. Washington, DC: National Institute of Education.

Knapp, M. S., Turnbull, B. J., & Shields, P. M. (September, 1990). New directions for educating the children of poverty. Educational Leadership, 48(1), 4-8.

Kunjufu, J. (April, 1990). Should we create separate classrooms for Black males? American Teacher, 47(7), 6.

Kuppersmidt, J. B., & Patterson, C. J. (1987). Interim report to the Charlottesville public schools on children at risk. University of Virginia, Charlottesville, VA.

Lentz, F., & Shapiro, E. (1985). Behavioral school psychology: A conceptual model for the delivery of psychological services. In T. Kratochwill (Ed.), Advances in School Psychology (Vol. 4, pp. 191-222). Hillsdale, NJ: Lawrence Erlbaum Associates.

Levine, D., & Havinghurst, R. (1989). Society and education (7th ed.). Needham Heights, MA: Allyn and Bacon.

Levy County School System (1990). Information on dropout. Bronson, FL.

Lewin, P., Nelson, R. E., & Tollefson, N. (1983). Teacher attitudes toward disruptive children. Elementary School Guidance and Counseling, 17, 188-193.

Lovett, T. C., & Curtiss, K. A. (1969). Academic response rate as a function of teacher and self-imposed contingencies. Journal of Applied Behavior Analysis, 2(1), 49-53.

Magee, D. (1987). Nurturing self-esteem. Guidance and Counseling, 2(5), 35-39.

Marsh, H. W. (1988). The big fish little pond effect on academic self-concept. Journal of Educational Psychology, 56(2), 100-103.

Mayer, G. R., Nafpaktitis, M., Butterworth, T., & Hollingsworth, P. (1987). A search for the elusive settings events of school vandalism: A correlation study. Education and Treatment of Children, 10, 259-270.

McCarty, T., Griffin, S., Apolloni, T., & Shores, R. E. (1977). Increased peer-teaching with group-oriented contingencies for arithmetic performance in behavior-disordered adolescents. Journal of Applied Behavior Analysis, 10(2), 313.

McDonald, W. S., Gallimore, R., & McDonald, G. (1970). Contingency counseling by school personnel: An economical model of intervention. Journal of Applied Behavior Analysis, 3(3), 175-182.

McKee, W., Witt, J., Elliott, S., Pardue, M., & Judycki, A. (1987). Practice informing research: A survey of research, dissemination, and knowledge utilization. School Psychology Review, 16, 338-347.

Mercer, C. D., & Mercer, A. R. (1985). Teaching students with learning problems (2nd ed.). Columbus, OH: Charles E. Merrill.

Metcalfe, B. (1981). Self-concept and attitudes to school. British Journal of Educational Psychology, 51, 66-76.

Murphy, J. J. (1985). Use of Differential Reinforcement of Low Rates (DLR) procedure to reduce disruptive classroom behavior. Las Vegas, NV: National Association of School Psychologists.

Murphy, J. J. (1988). Contingency contracting in schools: A review. Education and Treatment of Children, 257-269.

National Association of Elementary School Principals (1990). Dropping out early. Communicator, 13, 7, 8.

National Commission of Excellence in Education (1983). A nation at risk: The imperative for educational reform. Washington, DC: U.S. Government Printing Office.

National Education Association (1989). 1988-1989 estimates of school statistics (Statistical Report). Tallahassee, FL: Florida Department of Education, Division of Public Schools.

National Research Council (1989). A common destiny: Blacks and American society. Washington, DC: National Academy of Sciences.

Nettles, M. T. (1988). Toward Black undergraduate study equality in American higher education. Brooklyn, NY: Greenwood Press.

Ogbu, J. U. (1990). Minority education in comparative perspective. Journal of Negro Education, 59(1), 45-57.

Oliver, W. (1989). Black males and social problems: Prevention through Afrocentric socialization. Journal of Black Studies, 20(1), 15-39.

Olson, L. (1990, August). Rethinking retention: Holding students back may do more harm than good. Teacher Magazine, pp. 10-11.

Piers, E. V. (1984). Revised manual for the Piers-Harris Children's Self-Concept Scale. Los Angeles: Western Psychological Services.

Poppen, W. A., & Thompson, C. L. (1971). The effect of grade contracts on student performance. The Journal of Educational Research, 64(9), 420-424.

Poussaint, A. F. (1983). The mental health status of Blacks. In J. D. Williams (Ed.), The state of Black America (pp. 187-238). New York: National Urban League.

Ramey, C. T., & Suarez, T. M. (1985). Early intervention and the early experience paradigm: Toward a better framework for social policy. Journal of Children in Contemporary Society, 7(1), 3-13.

Rashke, D., Stainback, S., & Stainback, W. (1982). The predictive capabilities of three sources of promised consequence. Behavior Disorders, 213-218.

Rich, A. R., & Hyatt, J. M. (1981). Developmental trends in children's attributions for achievement and social outcomes. Paper presented at the annual meeting of the American Psychological Association. Los Angeles, CA.

Rose, J. S., Medway, F. J., Cantell, V. L., & Marus, S. H. (1983). A fresh look at retention-promotion controversy. Journal of School Psychology, 21, 201-211.

Safer, D. J. (1982). Dimensions and issues of school programs for disruptive youth. In D. J. Safer (Ed.), School programs for disruptive adolescents. Baltimore, MD: University Park Press.

Sandoval, J., & Hughes, G. (1982). Success in nonpromoted first grade children. Davis, CA: University of California.

Saylor, J. G., Alexander, W. M., & Lewis, A. J. (1981). Curriculum planning for better teaching and learning (4th ed.). New York: Holt, Rinehart, and Winston.

Shapiro, E. S. (1988). Preventing academic failure. School Psychology Review, 17(4), 601-613.

Shoenmyen, A. H. (1988). Florida statistical abstract. Gainesville, FL: University of Florida, College of Business Administration.

Shinn, M. R., Ramsey, E., Walker, H. M., Stieber, S., & O'Neill, R. E. (1987). Antisocial behavior in school settings: Initial differences in an at-risk and normal population. Journal of Special Education, 21, 69-84.

Skinner, B. F. (1971). Beyond freedom and dignity. New York: Knopf.

Smith, D. (1984). Effective discipline. Austin, TX: Smith.

Speltz, M., Shinamura, J., & McReynolds, W. (1982). Procedural variations in group contingencies: Effects on children's academic and social behaviors. Journal of Applied Behavior Analysis, 15, 533-544.

Stevens, R. O., & Pihl, R. O. (1982). The identification of the student at-risk for failure. Journal of Clinical Psychology, 38(3), 540-545.

Strain, P. S., Lambert, D. L., Kerr, M. M., Stagg, V., & Lenkner, D. A. (1983). Naturalistic assessment of children's compliance to teacher's requests and consequences for compliance. Journal of Applied Behavior Analysis, 16, 243-249.

Taliuli, N., & Gama, E. M. (1986). Causal attributions, self-concept, and academic achievement of children from low SES families. Paper presented at the annual meeting of the American Educational Research Association. San Francisco, CA.

Tyler, R. W. (1989). Educating children from minority families. Educational Horizons, 67(4), 114-118.

Vaillant, A. A., & Vaillant, S. K. (1982). Evaluating research in education and the behavioral sciences (2nd ed). Wayne, NJ: Avery Publishing Group.

Van Houten, R., Nau, P., Mackenzie-Keating, S., Sameoto, D., & Colavecchia, D. (1982). An analysis of some variables influencing the effectiveness of reprimands. Journal of Applied Behavior Analysis, 15, 65-81.

Walker, H. M. (1986). The assessment for integration into mainstream settings (AIMS) assessment system: Rationale, instruments, procedures, and outcomes. Journal of Clinical Child Psychology, 15, 55-63.

Walker, H. M., & McConnell, S. (1988). The Walker-McConnell Scale of Social Competence and School Adjustment: A social skills rating scale for teachers. Austin, TX: Pro-Ed.

Walker, H. M., & Rankin, R. (1983). Assessing the behavioral expectations and demands of less restrictive settings. School Psychology Review, 12, 274-284.

Walker, J. E., & Shea, T. M. (1984). Behavior management: A practical approach for educators (3rd ed.). St. Louis: Times Mirrow-Mosby College Publishers.

Wanat, E. (1983). Social skills: An awareness program with learning disabled adolescents. Journal of Learning Disabilities, 16, 35-38.

Weiner, B. (1980). The role of affect in rational (attributional) approaches to human motivation. Educational Researcher, 9(7), 4-11.

Weiner, B. (1984). Principles for a theory of student motivation and their application within an attributional framework. In R. E. Ames & C. Ames (Eds.), Research on motivation education: Student motivation (Vol. 1, pp. 15-36). Orlando: Academic Press.

White-Blackburn, G., Semb, S., & Semb, G. (1977). The effects of a good behavior contract on the classroom behaviors of sixth-grade students. Journal of Applied Behavior Analysis, 10(2), 312.

Williams, R. L., & Anandam, K. (1973). The effect of behavior contracting on grades. The Journal of Educational Research, 66(5), 230-236.

Witt, J., Hannafin, M., & Martens, B. (1983). Home-based reinforcement: Behavioral covariation between academic performance and inappropriate behavior. Journal of School Psychology, 21, 337-348.

Wlodkowski, R. J. (1984). Motivation and teaching: A practical guide. Washington, DC: National Education Association.

Wooster, A. D., & Carson, A. (1982). Improved reading and self-concept through communication and social skills training. British Journal of Guidance and Counseling, 10, 83-87.

Wyche, L. G., Sr. (1989). The tenth annual report to Congress: Taking a significant step in the right direction. Exceptional Children, 56(1), 14-16.

Yeakey, C. C., & Bennett, C. T. (1990). Race, schooling, and class in American society. Journal of Negro Education, 59(1), 3-18.

Zeeman, R. D. (1982). Creating change in academic self-concept and school behavior in alienated secondary school students. School Psychology Review, 11, 459-461.

BIOGRAPHICAL SKETCH

Leila W. Pratt was born on September 8, 1948, in Buena Vista, Georgia. She moved to Florida in 1955 and graduated from Campbell Senior High School in Daytona Beach, Florida, in 1966. She enrolled at Florida A and M University and received her Bachelor of Arts degree in psychology in 1971. In 1981 she enrolled at the University of Florida as a part-time student and received her Master of Health Science degree with certification in rehabilitation counseling in 1983. She continued as a part-time student in the school psychology doctoral program in the Department of Counselor Education and was admitted to candidacy in 1986. In 1989 she received her specialist degree in educational leadership from Nova University in Fort Lauderdale, Florida.

Mrs. Pratt was employed with Sunland Center, Gainesville, Florida, as a psychology technician from 1972 to 1982. While employed with Sunland, she was promoted to the positions of diagnostic and evaluation coordinator in 1982 and psychologist specialist in 1986. Mrs. Pratt terminated employment at Sunland in 1986 and accepted a position with the Levy County School Board as a school psychologist. In 1988 she transferred to the position of administrative

assistant-guidance counselor and was promoted in 1989 to the position of assistant principal at Bronson Elementary School in Levy County. In January 1992, Mrs. Pratt received another promotion to the position of Director of Personnel for Levy County School Board.

Mrs. Pratt has received several honors and awards: Leadership Gainesville VIII, Bruce Thomason Memorial Award, HRS Service Award, Phi Kappa Phi National Honor Society, Rehabilitation Counseling Scholarship Award, Outstanding Youth Director, Roderick McDavis Award for Academic Achievement, Keepers of Martin Luther King Dream List for Academic Excellence, and the Black Graduate Student Organization's Distinguished Achievement Award.

Mrs. Pratt is also a member of the following organizations: Gainesville Chapter of the Links, Incorporated, National Association of School Psychology, Florida Association of School Psychology, Pi Lambda Theta National Honor and Professional Association in Education, and Florida Association of School Personnel Administrators.

Mrs. Pratt is married to Robert L. Pratt and has one daughter, Robin Pratt.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Paul Joseph Wittmer, Chairman
Professor of Counselor Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Mary K. Dykes
Professor of Special Education

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Robert C. Ziller
Professor of Psychology

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

May 1992

Dean, College of Education

Dean, Graduate School

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